



ARIZONA DEPARTMENT OF TRANSPORTATION POLICIES AND PROCEDURES

SAF-6.01 ASBESTOS MANAGEMENT POLICY

Effective: December 30, 2003

Supersedes: None

Responsible Office: Safety & Health, (602) 712-7744

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Page 1 of 55

1.01 PURPOSE

To set forth uniform policies and procedures for the identification, disturbance, repair, maintenance, renovation and demolition of any building or structure which may contain asbestos and that are owned, leased, operated, controlled or supervised by ADOT.

1.02 SCOPE

- a. This policy applies to all ADOT employees, consultants, contractors and subcontractors involved in any asbestos identification, disturbance, maintenance, repair, renovation and demolition activities.
- b. The subject headings contained in this policy are as follows:

1.01	PURPOSE
1.02	SCOPE
1.03	AUTHORITY
1.04	DEFINITIONS
1.05	BACKGROUND
1.06	POLICY
1.07	RESPONSIBLE ASBESTOS MANAGEMENT GROUPS
1.08	PROCEDURES FOR ASBESTOS INSPECTIONS
1.09	PROCEDURES FOR DEMOLITION ACTIVITIES
1.10	PROCEDURES FOR RENOVATION, REPAIR AND MAINTENANCE ACTIVITIES INVOLVING NO ASBESTOS REMOVAL
1.11	PROCEDURES FOR ASBESTOS ABATEMENT ACTIVITIES
1.12	WORK ACTIVITIES INVOLVING THE ABATEMENT OF ASBESTOS CONTAINING MATERIALS NOT SUBJECT TO NESHAP REGULATIONS
1.13	CLASS IV ASBESTOS WORK
1.14	CORRESPONDING POLICIES

1.03 AUTHORITY

The Environmental Protection Administration's standards Title 40, Code of Federal Regulations (CFR) Part 61, Subpart M and Part 763, Subpart E, and the Occupational Safety and Health Administration's standards Title 29, CFR Part 1926.1101 and Part 1910.1001 provide the authority for this Policy.

1.04 DEFINITIONS

Abatement Is the removal of any ACM material.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 2 of 55

ADOT Facility	Is any building or structure owned, leased, operated, controlled or supervised by ADOT including, but not limited to, all offices buildings, shops, warehouses, storage units, individual dwelling units, mobile homes, culverts, pipes, bridges and highway structures, and any active or inactive waste disposal site.
AHERA	Is the Asbestos Hazard Emergency Response Act. AHERA regulations are 40 CFR 763, Subpart E and are enforced by the U.S. Environmental Protection Agency, the Arizona Department of Environmental Quality (DEQ), the Maricopa County DEQ, the Pinal County DEQ and the Pima County DEQ.
AHERA certified building inspector	An AHERA certified building inspector is an individual who has received and maintains certification through an EPA accredited institute such as The Asbestos Institute.
AHERA certified contractor/supervisor	An AHERA certified contractor/supervisor is an individual who has received and maintains certification through an EPA accredited institute such as The Asbestos Institute. All contracted Assessment/Oversight Contractors and Asbestos Abatement Contractors must hold current AHERA Contractor/Supervisor certifications.
Asbestos	Is chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite asbestos, and any of these minerals that has been chemically treated and/or altered.
Asbestos-containing material (ACM)	Are any materials containing more than 1% asbestos.
Category I non-friable ACM	Is asbestos-containing packing, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos. Category I non-friable ACM applies to NESHAP regulations.
Category II non-friable ACM	Are any materials, excluding Category I non-friable ACM such as cement (transite) pipe, panels, siding and other similar materials containing more than 1% percent asbestos. Category I non-friable ACM applies to NESHAP regulations.
Class I asbestos work	Are OSHA regulated activities involving the removal of thermal system insulation (TSI) and surfacing ACM and presumed asbestos containing material (PACM). In order to perform Class I asbestos work, 32 hours of training and certification is required.
Class II asbestos work	Are OSHA regulated activities involving the removal of ACM, which is not TSI or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles and construction mastics. Eight (8)

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 3 of 55

	hours of training and certification is required for all employees who perform Class II asbestos work.
Class III asbestos work	Are OSHA regulated repair and maintenance operations, where ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed. Class III asbestos work is limited the disturbance of ACM and PACM materials not to exceed one glove bag or waste bag 60 inches in length and width. Sixteen (16) hours of training and certification is required for all employees who perform Class III asbestos work.
Class IV asbestos work	Are OSHA regulated maintenance and custodial activities during which employees contact ACM and PACM and activities to clean up waste and debris containing ACM and PACM. This includes dusting surfaces, vacuuming carpets, mopping floors, cleaning up ACM or PACM materials from thermal system insulation or surfacing ACM/PACM. Two (2) hours of training and certification is required for all employees who perform Class IV asbestos work.
Demolition	Is the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.
Disturbance	Are activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris from ACM or PACM.
Friable ACM	Are any materials containing more than 1 % asbestos that when dry can be crumbled, pulverized, or reduced to powder by hand pressure.
Homogeneous area	Means an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.
Industrial Hygiene	Is that science and art devoted to the anticipation, recognition, evaluation, and control of those environmental factors or stresses arising in or from the workplace which may cause sickness, impaired health and well-being, or significant discomfort among workers or among citizens of the community.
Industrial Hygienist	Is a person with a college or university degree or degrees in engineering, chemistry, physics, medicine, or related physical and biological sciences who, by virtue of special studies and training, has acquired competence in industrial hygiene. Such special studies and training must have been sufficient in all of the above cognate sciences to provide the abilities to anticipate and recognize environmental factors and to understand their

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 4 of 55

effect on humans and their well-being, to evaluate (on the basis of experience and with the aid of quantitative measurement techniques) the magnitude of these stresses in terms of ability to impair human health and well-being, and to prescribe methods to eliminate, control, or reduce such stresses when necessary to alleviate their effects

NESHAP

Is National Emissions Standard for Hazardous Air Pollutants. NESHAP regulations are 40 CFR 61, Subpart M and are enforced by the U.S. Environmental Protection Agency, the Arizona Department of Environmental Quality (DEQ), the Maricopa County DEQ, the Pinal County DEQ and the Pima County DEQ.

Non-friable ACM

Is any material containing more than 1% asbestos that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Phase Contrast Microscopy (PCM)

Is a technique using a light microscope equipped to provide enhanced contrast between the fibers and the background. Samples for PCM are collected on a mixed cellulose ester membrane filter with a 0.8micrometer pore size. Filters are then cleared with an acetone vapor so that trapped particulate material can be viewed through the microscope at a magnification of approximately 400X. This method does not distinguish between fiber types and only counts those fibers 5 microns or longer, and at least 3 times as long as they are wide (3:1 aspect ratio). Because of these limitations, fiber counts by PCM typically provide only an index of the total concentration of airborne asbestos in the environment monitored. As the proportion of the airborne fibers, which are less than 0.25 micrometers in diameter increases, PCM becomes a less reliable analytical tool.

Polarized Light Microscopy (PLM)

PLM is the most commonly accepted method for analyzing bulk materials for the presence of asbestos. PLM is based on optical mineralogy using a light microscope equipped with polarizing filters. Identification of asbestos fiber bundles is based on the determination of optical properties displayed when the sample is treated with various dispersion staining liquids (refraction index liquids). In addition, identification can be substantiated by morphology of the fiber and the effect of polarized light on the fiber.

Presumed ACM (PACM)

Under OSHA regulations, all building materials with the exception of glass, wood or steel are presumed to contain ACM unless proven otherwise. Demonstration that PACM does not contain more than 1% asbestos may be 1) having a complete inspection conducted pursuant to the requirements of 40 CFR Part 763,

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 5 of 55

subpart E, or by 2) performing tests of the material containing PACM which demonstrate that no ACM is present in the material. Such tests shall include analysis of bulk samples collected in the manner described in 40 CFR 763.86.

Regulated ACM (RACM)

Under NESHAP regulations, RACM is 1) friable asbestos material, 2) Category I non-friable ACM that has become friable, 3) Category II non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or 4) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

The NESHAP requirements apply to each owner or operator of an abatement activity if the combined amount of RACM is:

- a. At least 260 linear feet on pipes;
- b. At least 160 square feet on other facility components; or
- c. At least 35 cubic feet of facility components where the length or area could not be measured previously.

At a NESHAP facility, removal of RACM below the EPA threshold amounts, and any amounts of Category I and Category II non-friable ACM is not subject to the asbestos NESHAP standards.

NOTE: Even though renovation or demolition work may not be subjected to the asbestos NESHAP standards, ALL asbestos related work activities are regulated by OSHA!

Regulated area

Is an area established by the contractor to demarcate areas where Class I, II, and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the OSHA permissible exposure limit (PEL) of 0.1 f/cc.

Removal

Is all operations where ACM, RACM and/or PACM are taken out or stripped from structures or substrates, including demolition operations.

Renovation

Is altering a facility or one or more facility components in any way, including the stripping or removal of ACM

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 6 of 55

	and/or RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.
Repair	Is overhauling, rebuilding, reconstruction, or reconditioning of structures or substrates, including encapsulation or other repair of ACM or PACM attached to structures or substrates.
Surfacing material	Is material that is sprayed, troweled-on or otherwise applied to surfaces such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes.
Surfacing ACM	Is surfacing material, which contains more than 1% asbestos.
Thermal system insulation (TSI)	Are materials applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.
Thermal system insulation ACM	Are thermal system insulation materials, which contains more than 1% asbestos.
Transmission Electron Microscopy	TEM is a technique which focuses an electron beam onto a thin sample. As the beam transmits through certain areas of the sample, an image resulting from varying density of the sample is projected onto a fluorescent screen. TEM is currently considered the best available analytical method for identifying asbestos fibers collected on air samples. TEM can identify the smallest fibers and is specific for asbestos. Only AHERA (for asbestos abatement projects in schools) requires TEM analysis of for final air clearances.
Working day	Means Monday through Friday and includes holidays that fall on any of the days Monday through Friday.

1.05 BACKGROUND

The term asbestos describes naturally occurring fibrous minerals found in certain types of rock formations. Asbestos is mined in much the same way that other materials, such as iron, lead, and copper are. There are many varieties of asbestos: the three most common are chrysotile, amosite, and crocidolite. Asbestos is contained in more than 3,500 different building products. These include thermal insulation, fireproofing, floor coverings, ceiling tile, cement pipe, and acoustical and decorative treatment for ceilings and walls. Asbestos fibers are mixed during processing with material, which binds them together so they can be used in various applications. Asbestos became a very popular commercial product because it is a relatively inexpensive, virtually indestructible material with desirable physical properties including chemical resistance, incombustibility, thermal insulating ability, electrical insulating ability, mechanical strength, flexibility and good friction and wear characteristics. The amount of asbestos in these products varies widely from less than 1 percent to nearly 100 percent. Any material with at least 1 percent asbestos is considered to be an asbestos-containing material (ACM). While it is often possible to

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 7 of 55

“suspect” that a product or material is/or contains asbestos by visual determination, actual determinations can only be made by instrumental analysis. Until a product is tested, it must be assumed that the product contains asbestos. ADOT is aware that asbestos can be a health hazard, but with proper management and work practices any hazard will be minimized.

1.06 POLICY

- a. No facility owned, leased, operated, controlled or supervised by ADOT shall be remodeled, modified, repaired, altered or changed in any way, including the installation or removal of equipment or devices that disturbs any portion of the building or building systems, nor shall buildings or structures, which will require modification, be added to the ADOT facilities inventory without the written authorization of the appropriate responsible individual as defined in Section 1.07.
- b. No facility owned by ADOT may be demolished without the written authorization of the appropriate responsible individual as defined in Section 1.07.
- c. Prior to the disturbance of any facility surface through repair and maintenance, renovation, removal or demolition activities, every ADOT facility must be inspected to determine if ACM is present. If ACM is identified, it must be properly removed prior to the planned disturbance.
- d. All materials installed in the building of any new facility, or during any renovation, repair and maintenance operations shall be asbestos free.
- e. All costs associated with regulatory compliance will be the responsibility of the requesting party within ADOT unless the inspection, repair and maintenance, renovation, abatement, disposal and/or demolition are part of a project for which capital improvement funds have been appropriated.
- f. An appropriate number of employees from Right-Of-Way Property Management, Environmental Planning, ITD Maintenance Districts, General Operations and Safety shall receive and maintain AHERA Contractor/Supervisor certification so as to ensure compliance with all NESHAP and OSHA regulations and with the policies and procedures contained herein.
- g. General Operations, Right-of-Way Property Management and Environmental Planning shall send quarterly reports listing the expected or planned up-coming demolition, renovation, repair and maintenance activities to the District Maintenance Superintendents, Phoenix Construction District Superintendent and the ADOT designated EPA/NESHAP primary and backup contacts so as to keep them apprised of all expected and up-coming demolition and asbestos abatement activities for monitoring of compliance purposes.

1.07 RESPONSIBLE ASBESTOS MANAGEMENT GROUPS

- a. The ADOT General Operations Manager or Designee (hereafter General Operations) is responsible for the management and monitoring of asbestos and asbestos related issues associated with all ADOT owned, leased, operated, controlled or supervised by ADOT for business purposes.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 8 of 55

- b. The ADOT Right-Of-Way Property Management Section Manager or Demolition Coordinator is responsible for the management and monitoring of asbestos and asbestos related issues associated with building acquired as part of ADOT's right-of-way acquisitions.
- c. The ADOT Environmental Planning Group Hazardous Material Coordinator or Designee is responsible for the management and monitoring of asbestos and asbestos related issues associated with all ADOT bridges and highways structures on highway development projects.
- d. The District Maintenance Superintendents, the Phoenix Construction Superintendent, and ADOT designated EPA/NESHAP primary and backup contacts are responsible for monitoring of compliance with asbestos NESHAP regulations on all ADOT asbestos abatement and demolition projects.
- e. The ADOT Safety and Health Section is responsible for the writing the Asbestos Management Policy, for providing consultation on safety and health issues pertaining to asbestos work activities and for providing Class IV Asbestos Awareness training. The ADOT Safety and Health Section is also responsible for providing to ADOT General Operations those asbestos abatements services required of Assessment/Oversight Contractors.
- f. The Assessment/Oversight Contractors are responsible for providing asbestos management and consulting services, for accessing and characterizing the ACM, for developing primary and alternative recommendations for remediation, providing oversight on NESHAP regulated abatement projects, coordinating project activities and ensuring project compliance with contract provisions and with all applicable Federal, State, County and local rules and regulations on ADOT projects. All Assessment /Oversight Contractors must hold current AHERA contractor/supervisor and AHERA building inspector certifications.

1.08 PROCEDURES FOR ASBESTOS INSPECTIONS

Responsibility	Action
Requesting Party Project Manager	<ol style="list-style-type: none">1. Completes an Asbestos Clearance Request form (See Exhibit A) describing the planned work and e-mails the form to the appropriate ADOT Asbestos Management Group listed in Section 1.07.2. The request form shall include the following.<ol style="list-style-type: none">a. Where appropriate, the project number, parcel number, any identifying signs, building function type, numbers or names, and address of the facility.b. Photos, site plan and/or floor plan.c. Description of what planned work is to be performed that necessitates the need for an inspection.d. Desired or mandated completion date of planned work.e. Instructions on how to gain access to the facility.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 9 of 55

- Responsible Asbestos Mgmt. Group:
3. Checks files to determine if an asbestos inspection has been completed and if it is current. If an inspection has not been performed or the existing inspection is out of date, arranges for an inspection or re-certification of existing inspection in accordance with all State and County DEQ, OSHA regulations, and State procurement rules and contracts. See the "Asbestos Identification Requirements" flowchart in Appendix C for asbestos inspection requirements.

NOTE: Maricopa County Air Pollution Control regulations Rule 370, Section 301.8 Subpart M states that "Each owner or operator of a demolition activity or renovation activity involving a facility as defined in 40 CFR 61, Subpart M shall...inspect the facility within 12 months of commencement of demolition activity. *(All facilities, regardless of the date of construction).*" This means that if a building has not been re-certified within 12 months of a demolition or renovation activity, a new asbestos inspection must be conducted.

- Assessment/Oversight Contractor:
4. If an asbestos inspection needs to be performed, all asbestos inspections shall be performed by an AHERA certified building inspector. Inspections shall include, at a minimum:
 - a. A review of available documents, blueprints, construction specifications, etc.
 - b. A visual inspection of the facility areas and elements to locate suspect ACM.
 - c. Identification of all homogeneous areas of friable suspected ACM and all homogenous areas of non-friable suspected ACM.
 - d. Sampling of suspect ACM. The inspector shall use safe handling procedures and generally accepted laboratory practices for sample preparation and analysis. Sampling of suspect ACM shall be conducted as followed.
 - (1) Surfacing Material. The inspector shall collect, in a statistically random manner that is representative of the homogeneous area, bulk samples from each homogeneous area of friable surfacing material that is not assumed to be ACM, and shall collect the samples as follows:

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 10 of 55

- (a) At least three bulk samples shall be collected from each homogeneous area that is 1,000 ft² or less.
- (b) At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 ft² but less than 5,000 ft².
- (c) At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 ft².

(2) Thermal system insulation.

- (a) Except as provided in paragraphs (b) through (c) of this section, an accredited inspector shall collect, in a randomly distributed manner, at least three bulk samples from each homogeneous area of thermal system insulation that is not assumed to be ACM.
- (b) Collect at least one bulk sample from each homogeneous area of patched thermal system insulation that is not assumed to be ACM if the patched section is less than 6 linear or square feet.
- (c) In a manner sufficient to determine whether the material is ACM or not ACM, collect bulk samples from each insulated mechanical system that is not assumed to be ACM where cement or plaster is used on fittings such as tees, elbows, or valves.

(3) Miscellaneous Material. In a manner sufficient to determine whether material is ACM or not ACM, an accredited inspector shall collect bulk samples from each homogeneous area of friable miscellaneous material that is not assumed to be ACM.

(4) Non-friable suspected ACM. If any homogeneous area of non-friable suspected ACM is not assumed to be ACM, then an accredited inspector shall collect, in a manner sufficient to determine whether the material is ACM or not ACM, bulk samples from the homogeneous area of non-friable suspected ACM that is not assumed to be ACM.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 11 of 55

NOTE: A homogeneous area shall be determined to contain ACM based on a finding that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1%.

- e. Analysis of the samples shall be by an accredited NVLAP (National Voluntary Laboratory Accreditation Program) laboratory. Analysis of the samples collected shall be by, at a minimum, polarized light microscopy.
 - f. If asbestos is present, meeting with ADOT responsible individual(s) to develop plans for asbestos management or abatement.
 - g. Designation of appropriate response action.
5. The Assessment/Oversight Contractor shall provide a report for each inspection conducted. The report shall include, at a minimum:
- a. Details of the property surveyed including physical address and legal description.
 - b. Classification of ACM materials in categories of RACM (TSI, surfacing, Category I, and II) and non-friable Category I and II ACM materials.
 - c. Description, location and quantity of RACM and non-friable Category I and II ACM present at the facility surveyed.
 - d. Condition of ACM, if present.
 - e. Any potential health risks.
 - f. Type and details of any recommended remediation or removal.
 - g. A site plan of the exact locations where samples were collected during the inspection, a description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and the inspector's accreditation number.
 - h. Name of accredited analytical laboratory, the laboratory's accreditations, methods of sample analysis, chain of custody records and laboratory reports.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 12 of 55

- Responsible Asbestos Mgmt. Group:
6. Forwards a copy of the current inspection results to the requesting party. A copy of the clearance request form and inspection results shall also be forwarded to the appropriate District Maintenance Superintendent and/or Phoenix Construction Superintendent and ADOT designated EPA/NESHAP primary and backup contact personnel for monitoring compliance during demolition and asbestos abatement projects regulated by NESHAP.

1.09 PROCEDURES FOR DEMOLITION ACTIVITIES

Responsibility

Action

Requesting Party Project Manager

1. Completes the Asbestos Clearance Request form describing the recommendations for demolition activities and e-mails the form to the appropriate ADOT Asbestos Management Group listed in Section 1.07
2. The clearance request shall include the following:
 - a. Where appropriate, the project number, parcel number, any identifying signs, building function type, numbers or names, and address of the facility.
 - b. Description of recommendations for demolition.
 - c. The desired or mandatory completion date.
 - d. Digital photos of the facility to be demolished.
 - e. Instructions for gaining access to the facility.

For General Operations only:

3. Forwards an Authorization For Demolition of ADOT Building (see Exhibit B) form to the ADOT Fixed Assets Manager.

Fixed Assets Manager

4. Determines the appropriate authorization process and authorizes demolition by ADOT or disposal through the Arizona Department of Administration Surplus Property.
5. If demolition is authorized, the Fixed Assets Manager will sign the authorization form and forward it to General Operations.

For General Operations only:

6. Has the State Building Inspector conduct an inspection of the building to be demolished and prepares a written report and recommendation to the General Operation Manager.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 13 of 55

7. If the demolition is warranted, the Building Inspector sign the authorization form provided by the Fixed Assets Manager and forwards it to the General Operations Director.
 8. If the demolition is unwarranted, the General Operations shall notify the requesting party of the finding and determine if additional action is required.
- Responsible Asbestos Mgmt. Group:
9. If the demolition is warranted, the Responsible Asbestos Management Group shall check files to determine if an asbestos inspection has been completed and if it is current. If an inspection has not been performed or the existing inspection is out of date, arranges for an inspection or re-certification of existing inspection in accordance with all State and County DEQ and OSHA regulations, State procurement rules and contracts and as outlined in paragraph 1.08.
 10. If asbestos is present in the facility, see Section 1.11.
 11. If asbestos is not present, determines with the requesting party how demolition will be accomplished. If an outside contractor will be used, arranges for a demolition contractor in accordance with State procurement rules.
 12. Obtain city or county demolition permit(s).
 13. Ensures that the required NESHAP Notification for Renovation and Demolition Activities form (see Exhibit C) are submitted to the applicable State or County NESHAP Coordinator. The "Asbestos NESHAP Notification Requirements Summary" in Appendix A and the "Asbestos EPA Notification Requirements" flowchart in Appendix C shall be utilized to ensure compliance with NESHAP regulatory requirements.
 - a. The abatement contractor **must** send a copy of the NESHAP notification form to ADOT for review prior to the start of any demolition work.
 - b. The NESHAP notification form sent to the applicable State or County NESHAP Coordinator must be properly filled out and **must bear a postmark of at least ten (10) working days prior to the planned demolition start date.**
 - c. When the demolition start date, will begin on a date earlier than the original start date, ADOT

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 14 of 55

shall require the contractor to notify applicable State or County NESHAP Coordinator and ADOT with a written notice of the new start date **at least 10 working days before the new start date.**

- d. When the planned start date for demolition is revised to begin after the date contained in the notice, the ADOT shall require each contractor to notify the applicable State or County NESHAP Coordinator and ADOT by telephone and Fax as soon as possible and before the original start date and also notify ADEQ and/or appropriate County NESHAP Coordinator in writing by hand delivery or by certified mail, prior to the expiration of the original start date.
- e. The notice **must** be submitted to the applicable State or County NESHAP Coordinator, even if no asbestos was found in the facility to be demolished.

NOTE: The demolition contractor is the person or entity that MUST file the 10-day notice prior to demolition or partial demolition.

- 14. Sends a signed and dated copy of Asbestos Clearance Request form and/or Authorization for Demolition of ADOT Building form, a copy of the NESHAP notification form, a copy of the asbestos inspection report and any other applicable information to the appropriate District Maintenance Superintendent, and/or Phoenix Construction Superintendent, and the ADOT designated EPA/NESHAP primary and backup contact personnel for the monitoring of compliance during demolition.

ADOT NESHAP monitoring personnel: 15. Reviews all forms and reports received from responsible ADOT Asbestos Management Group to ensure that there are no discrepancies with any NESAHP regulations.

- 16. Notifies responsible ADOT Asbestos Management Group if any discrepancies are found.

Responsible Asbestos Mgmt. Group: 17. Ensures that the demolition begins on the start date specified on the NESHAP Notification of Renovation and Demolition Activities form.

- 18. Oversees actual demolition and ensure compliance with all applicable State and County DEQ and OSHA regulatory requirements.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 15 of 55

NOTE: If suspect material(s) were not accessible for testing and is therefore discovered during the demolition project, the demolition of those material(s) shall not proceed until the suspect material(s) is tested to confirm whether or not it is RACM. If the material(s) is RACM, and for safety reasons cannot be safely removed, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and keep adequately wet at all times until disposed of.

General Operations only:

19. Secures witness signatures of demolition authorization form attesting to the demolition of the asset.
20. Copies of completed forms are forwarded to the Fixed Assets Manager and Building Inspector.

Responsible Asbestos Mgmt. Group:

21. Retains a copy of all demolition records, including NESHAP Notification forms, for at least 5 years.

1.10 PROCEDURES FOR RENOVATION, REPAIR AND MAINTENANCE ACTIVITIES INVOLVING NO ASBESTOS MATERIALS

Responsibility

Action

Request Party Project Manager:

1. Completes the Asbestos Clearance Request form describing the renovation, repair or maintenance needed and e-mails the form to the appropriate ADOT Asbestos Management Group listed in Section 1.07.

NOTE: Completion of the clearance request forms are required for maintenance and repair work when there will be a disturbance materials other than glass, wood or steel.

2. The clearance request form shall include the following:
 - a. Where appropriate, the project number, parcel number, any identifying signs, building function type, numbers or names, and address of the facility.
 - b. Site plan and/or floor plan.
 - c. Description of what planned work is to be performed that necessitates the need for an asbestos inspection or clearance.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 16 of 55

- d. The desired or mandated completion date of the planned work.
 - e. Instructions on how to gain access to the facility.
- Responsible Asbestos Mgmt. Group:
- 3. If the renovation, repair or maintenance request in not approved, the Responsible Asbestos Management Group shall notify the requesting party by e-mail or inter-office memorandum.
 - 4. If renovation, repair or maintenance request is approved, the Responsible Asbestos Management Group shall checks files to determine if an asbestos inspection has been completed and if it is current. If an inspection has not been performed or the existing inspection is out of date, arranges for an inspection or re-certification of existing inspection in accordance with all State and County DEQ and OSHA regulations, State Procurement rules and contracts and as outlined in paragraph 1.08.
 - 5. If asbestos is present, see Section 1.11
 - 6. If asbestos is not present, works with the requesting party how the renovation, repair or maintenance work will be accomplished. If an outside contractor will be used, arranges for a contractor in accordance with State procurement rules.
 - a. All contracts shall require all materials installed in any renovation, repair and maintenance project to be asbestos free.
 - b. The contractor shall be required to supply Material Safety Data Sheets (MSDSs) for all materials, with the exception of glass, wood and steel, installed during any renovation, repair and maintenance project.
 - 7. Forwards a copy of the signed and dated Asbestos Clearance Request form indicating asbestos clearance has been given for the work planned to appropriate District Maintenance Superintendent, and/or Phoenix Construction Superintendent and the ADOT designated EPA/NESHAP primary and backup contacts. The clearance request form must be signed and dated by the responsible ADOT Asbestos Management Group authorized to give clearance.
- Requesting Party Project Manager:
- 8. Oversees actual renovation, repair and maintenance to ensure compliance with all OSHA regulations and contract requirements including the review of MSDSs.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 17 of 55

9. Forward all MSDSs received to appropriate ADOT Asbestos Management Group.

1.11 PROCEDURES FOR ASBESTOS ABATEMENT ACTIVITIES SUBJECTED TO NESHAP REQUIREMENTS

Responsibilities

Action

Responsible Asbestos Mgmt. Group:

1. If the review of asbestos inspection reports for requested demolition, renovation, repair or maintenance work shows asbestos is present and the requested work is approved, the responsible ADOT Asbestos Management Group who received the clearance request form shall arrange for an Assessment Contractor and asbestos abatement contractor for the planned work in accordance with all State procurement rules and State contracts. The checklists in Appendix B and the Flowcharts in Appendix C shall also be utilized to ensure compliance with EPA and OSHA regulations.

NOTE: If the planned work involves the removal of ACM not subjected to NESHAP regulations see Section 1.12. See definitions of regulated ACM for abatement work regulated by NESHAP.

- a. Contracts shall only be awarded to abatement contractors that have had no enforcement action issued to them in the past two years by a regulating DEQ authority and/or any unresolved outstanding enforcement actions imposed upon them by a regulating DEQ authority as a means of ensuring ADOT's compliance with all State and County NESHAP regulations. Compliance and enforcement history for contractors, consultants, etc. can be found at: <http://www.epa.gov/echo/>
- b. Contracts shall only be awarded to abatement contractors who possess current Asbestos Contractor/Supervisor certifications and whose workers possess the appropriate current Class I, II, III and/or IV certifications depending upon type asbestos work activities that are required to be performed.
- c. Contracts shall require the abatement contractors to have an AHERA certified Contractor/Supervisor on site the duration of the any asbestos abatement or repair and maintenance projects.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 18 of 55

- d. Contracts shall require abatement contractors to have sufficient number of "inspection viewing windows" on all NESHAP regulated asbestos-abatement projects. Inspection viewing windows shall be required so as to allow ADOT personnel to view the regulated activities inside a regulated area from the outside which will in turn limit the need for ADOT personnel to enter a regulated area for monitoring purposes.

NOTE: Maricopa County already requires inspection-viewing windows/devices on all NESHAP regulated asbestos abatement projects.

NOTE: ADOT's designated monitoring personnel including the Regional Facility Managers, Phoenix Construction Superintendent and District Maintenance Superintendents are required to enter into ADOT's Respiratory Protection Program as the need for them to enter a regulated area may become necessary.

2. Works with the Assessment/Oversight Contractor and asbestos abatement contractor to coordinate their activities to establish a start date and completion date.
3. Provide the abatement contractor with specific written information concerning the project and may be accomplished via a task/order format. The information provided shall include:
 - a. The address of the site where services are required including a specific description of the site (e.g., boiler room, steam tunnel, residential structures, commercial building, etc.).
 - b. A drawing or map of the area buildings and any construction records that might identify asbestos construction materials.
 - c. Other inspection reports.
 - d. Purpose for the project: emergency removal/cleanup, renovation, demolition, and repair or maintenance.
 - e. Other hazards, which require assessment by technically trained inspectors.
 - f. Other abatement contractors whose work they may be monitoring, and items in other contracts

that need to be coordinated with the assessment contractor's service activities.

- g. Coordination for moving of employees, inmates, etc.
4. The ensure that the required NESHAP Notification for Renovation and Demolition Activities form is submitted to applicable State or County NESHAP Coordinator. The "Asbestos NESHAP Notification Requirements Summary" in Appendix A and the "Asbestos EPA Notification Requirements" flowchart in Appendix C shall be utilized to ensure compliance with NESHAP regulatory requirements.
- a. The abatement contractor **MUST** send a copy of the NESHAP notification form to ADOT for review prior to the start of any asbestos abatement work.
- b. The NESHAP notification form sent to the applicable State or County Asbestos Coordinator must be properly filled out and **must bear a postmark of at least ten (10) working days prior to the planned asbestos abatement start date.** The start date includes any site preparation that would break up, dislodge or similarly disturb ACM.
- NOTE: The abatement contractor is the person or entity that must send the 10-day notification to the applicable State or County Asbestos Coordinator.**
- c. When asbestos abatement start date, will begin on a date earlier than the original start date, ADOT shall require the contractor to notify applicable State or County NESHAP Coordinator and ADOT with a written notice of the new start date **at least 10 working days before the new start date.**
- d. When the planned start date for asbestos removal is revised to begin after the date contained in the notice, the ADOT shall require each contractor to notify the applicable State or County NESHAP Coordinator and ADOT by telephone and Fax as soon as possible and before the original start date and also notify ADEQ and/or appropriate County NESHAP Coordinator in writing by hand delivery or by certified mail, prior to the expiration of the original start date.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 20 of 55

5. Sends copy of Asbestos Clearance Request form, signed and dated by responsible ADOT Asbestos Abatement Group authorized to give clearance, the NESHAP notification form, the asbestos inspection report and any other applicable information to the appropriate District Maintenance Superintendent and/or Phoenix Construction Superintendent, and the ADOT designated EPA/NESHAP primary and backup contacts for monitoring of compliance during asbestos abatement.
- Assessment/ Oversight Contractor:
 6. Oversees the actual asbestos abatement or repair and maintenance project to ensure compliance with all applicable DEQ and OSHA regulatory requirements and State contract requirements.
 7. The Assessment/Oversight Contractor responsibilities shall include:
 - a. Act as ADOT's Agent throughout the asbestos abatement project. The Assessment/Oversight Contractor shall have the authority to stop the work if the asbestos abatement contractor is violating any laws or regulations. A written report shall be completed for any violation found on an abatement project. The report shall include:
 - (1) The date and time the violation was observed.
 - (2) The name of the abatement contractor and name of the contractor's AHERA certified Contractor/Supervisor on the project.
 - (3) Description of the violation.
 - (4) Any comments given by the abatement contractor's supervisor regarding reasoning for observed violation.
 - (5) If possible, photos of the observed violation.
 - (6) Date and time the violation was corrected.
 - (7) Date and time the abatement project was allowed to resume.
 - b. Comply with the requirements of the following governing asbestos projects, removal, training, and disposal:
 - (1) NESHAP regulations: 40 CFR, Part 61, Subpart M.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 21 of 55

- (2) AHERA regulations: 40 CFR, Part 763, Subpart E.
- (3) OSHA regulations: 29 CFR Part 1926.1101.
- (4) Arizona Revised Statutes Title 49.
- (5) Any other applicable Federal, State, County or local rules and regulations.
- c. Retain all copies of the regulations stated above on each site when work is being accomplished.
- d. Ensuring the abatement contractor notifies ADOT, ADEQ, designated county agencies, local agencies and prior to the scheduled work being implemented.
- e. Meet with ADOT to review the work schedule and specify special needs. At that time, the assessment contractor shall identify a project manager who shall be on-site for the duration of the project with authority to act as the assessment contractor's authorized representative.
- f. Provide a safety plan with provisions including:
 - (1) First aid and emergency procedures and equipment.
 - (2) Delineation of restricted work zones and barricading of openings in the work area. Any restrictions shall be coordinated in advance with ADOT.
 - (3) Securing of equipment and materials against accident or tampering.
 - (4) Air monitoring for detection of possible explosive or toxic vapors, or oxygen deficient atmosphere.
 - (5) Designated "No Smoking" areas.
 - (6) Personal protective equipment requirements.
 - (7) Employee training in pertinent safety procedures including fire and explosion prevention, heat stress, confined spaces, and toxic vapors identification.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 22 of 55

- (8) Sanitation, eating and drinking facilities.
- (9) Traffic control and safe vehicle operations.
- (10) Safety of State employees, and visitors.
- (11) Dust control.
- (12) Housekeeping.
- (13) Site restoration.
- (14) Posting, if necessary, of any contaminated areas.
- g. Check the asbestos abatement contractor's employee records to ensure all medical and training records and certifications are current. The assessment contractor shall have at the site a copy of the written safety, respiratory, and hazardous communications program manuals.
- h. Meeting and distributing all notes of project meetings.
- i. Ensure that all barriers, signs, and appropriate labels are posted as required pursuant to any or all regulations.
- j. Inspect the enclosure or regulated area during construction, and approve, prior to completion and before asbestos abatement is implemented.
- k. Authorize ADOT representatives access to the work site, materials, records, or any other relevant data specified herein, and, furthermore, the assessment contractor shall provide proper facilities for such access and inspection. Only authorized personnel will be allowed on the work site providing that they have obtained a security clearance from ADOT.
- l. Any and all site inspections, estimations of quantity of work, or recognition of unusual or special situations, which may affect a timely and scheduled completion of the work.
- m. Perform air monitoring in accordance with NESHAP and OSHA standards and as follows:
 - (1) For all Class I and II abatement projects, the Assessment Contractor shall conduct air monitoring for background or reference

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 23 of 55

ambient asbestos fiber levels before the asbestos projects begin.

- (2) Personnel monitoring, independent of that done by the asbestos Abatement Contractor, as a quality assurance measure. A minimum of one worker per day shall be monitored during actual removal of asbestos. Additional personnel monitoring shall be accomplished when warranted by the size of the project or by circumstances that may require excursion level monitoring.
- (3) Area monitoring outside the exhaust, decon and load-out areas when full enclosures are used, to demonstrate control of fiber release to the outside air.
- (4) Monitoring to ensure that the negative air condition is maintained inside the enclosure when they are used.
- (5) Final clearance monitoring for all enclosures when required by NESHAP and OSHA regulations. The number of samples shall be determined by the size of the area and the configuration of the space in each enclosure. A minimum of five samples should be taken. Analysis shall be by Phase Contrast Microscopy (PCM) unless otherwise specifically stated. Air samples results shall be available on the job site within 24 hours (turnaround time), or less.
- (6) PCM final air clearance shall be to the AHERA standard of 0.01 f/cc for all samples before the enclosure can be removed and the area reoccupied. If TEM is used for final clearance, TEM final air clearance shall be 70 asbestos structures/mm² of filter surface area.

- n. Submits final report including all the monitoring results, copies of manifests, field notes, reports of abatement contractor violations and recommendations related to the project to the responsible ADOT Asbestos Management Group prior to final payment.

- ADOT NESHAP monitoring personnel:
8. Visits the work site at least once per work shift during the course of the asbestos abatement project to ensure the regulated area is in compliance with all NESHAP and OSHA regulatory requirements. The checklists in Appendix B and the Flowcharts in

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 24 of 55

Appendix C shall be utilized for monitoring the contractor's compliance with EPA and OSHA regulatory requirements.

NOTE: The responsible ADOT Asbestos Management personnel may also be the ADOT NESHAP monitoring personnel.

9. If the regulated area is not in compliance with NESHAP regulations, the ADOT Monitoring Personnel shall instruct the Assessment/Oversight Contractor to stop work until the violation is rectified.
10. A written report shall be completed for any violation found on the project. In addition to identifying the Assessment Contractor (company name) and their authorized Project Manager for the project, the report shall include all information outlined in Paragraph 7(a) of this section. These reports, in addition to the Assessment/Oversight Contractor's reports shall be used to determine future contract awards.

Responsible Asbestos Mgmt. Group: 11. Retains a copy of all NESHAP notifications, project reports, notes and records and waste shipment records for at least 5 years.

1.12 WORK ACTIVITIES INVOLVING THE REMOVAL OF ASBESTOS CONTAINING MATERIALS NOT SUBJECT TO NESHAP REGULATIONS

The following policy and procedures applies to all asbestos related work activities involving the abatement of ACM not subject to the NESHAP regulations. This includes all Class I, II and III asbestos work. Contracting an Assessment/Oversight Contractor for oversight shall be at the discretion of the responsible Asbestos Management Group. If a contract is not awarded to an Assessment Contractor, oversight of project shall be the responsible Asbestos Management Group. The checklists in Appendix B and the Flowcharts in Appendix C shall be utilized for monitoring the contractor's compliance with EPA and OSHA regulatory requirements.

Responsibility

Action

- Responsible Asbestos Mgmt. Group:
1. If the review of asbestos inspection reports for requested renovation, repair or maintenance work shows asbestos is present and the requested work is approved, the responsible ADOT Asbestos Management Group who received the clearance request form shall arrange for an asbestos abatement contractor or an appropriate repair and maintenance contractor for the planned work in accordance with all State procurement rules.
 - a. Contracts shall only be awarded to contractors that have had no enforcement action issued to them in the past two years by a regulating DEQ authority and/or have no unresolved outstanding

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 25 of 55

enforcement actions imposed upon them by a regulating DEQ authority. Compliance and enforcement history for contractors, consultants, etc. can be found at: <http://www.epa.gov/echo/>

- b. Contracts shall only be awarded to contractors who possess current Asbestos Contractor/Supervisor certifications and whose workers possess the appropriate current Class I, II, III and/or IV certifications depending upon type asbestos work activities that are required to be performed.
 - c. Contracts shall require the contractors to have an AHERA certified Contractor/Supervisor on site the duration of the any asbestos abatement or repair and maintenance projects.
 - d. Contracts shall require contractors to have sufficient number of "inspection viewing windows" on all NESHAP regulated asbestos-abatement projects. Inspection viewing windows shall be required so as to allow ADOT personnel to view the regulated activities inside a regulated area from the outside which will in turn limit the need for ADOT personnel to enter a regulated area for monitoring purposes.
2. Works with the contractor to coordinate their activities to establish a start date and completion date.
3. Provide the contractor with specific written information concerning the project and may be accomplished via a task/order format. The information provided shall include:
 - a. The address of the site where services are required including a specific description of the site (e.g., boiler room, steam tunnel, residential structures, commercial building, etc.).
 - b. A drawing or map of the area buildings and any construction records that might identify asbestos construction materials.
 - c. Other inspection reports.
 - d. Purpose for the project: emergency removal/cleanup, renovation, demolition, and repair or maintenance.
 - e. Other hazards, which require assessment by technically trained inspectors.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 26 of 55

- f. Other abatement contractors whose work they may be monitoring, and items in other contracts that need to be coordinated with the assessment contractor's service activities.
 - g. Coordination for moving of employees, inmates, etc.
 - 4. Oversees the renovation or repair and maintenance project to ensure compliance with all OSHA regulatory requirements and State contract requirements. The checklist and flowchart in Appendix B and C shall be used to ensure the contractor is in compliance with all OSHA regulatory requirements
 - 5. Check the contractor's employee records to ensure all medical and training records and certifications are current.
- Contractor
 - 6. The contractor's responsibilities shall include:
 - a. Provide a safety plan with provisions as outlined in Section 1.11.
 - b. Comply with all OSHA regulations governing Class I, II, and III asbestos projects, removal, training and disposal.
 - c. Retain a copy of the OSHA regulations 29 CFR Part 1926.1101 on the site when work is being accomplished.
 - d. On multi-employer worksites, the contractor shall inform other employers on the site of the nature of the contractor work with asbestos and/or PACM, of the existence of and requirements pertaining to regulated areas, and the measures taken to ensure that employees of employers are not exposed to asbestos.
 - e. Ensure that all barriers, sign, and appropriate labels are posted as required by OSHA.
 - f. Inspect the enclosure or regulated area before the renovation, repair or maintenance project is implemented and at least once during each work shift. If there is a breach of the enclosure, the contractor shall repair the breach immediately.
 - g. Authorize ADOT compliance monitoring personnel access to the work site, materials, records, or any other relevant data specified

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 27 of 55

herein, and, furthermore, the proper facilities for such access and inspection. Only authorized personnel will be allowed access providing that they have obtained clearance from ADOT.

- h. Any and all site inspections, estimations of quantity of work, or recognition of unusual or special situations, which may affect a timely and scheduled completion of the work.
- i. Ensure through on-site supervisions, that employees set up, use, and remove engineering controls, use work practices and protective clothing and equipment in compliance with all requirements.
- j. Ensure that employees use the hygiene facilities and observe the decontamination procedures specified by OSHA.
- k. Ensure that through on-site inspection, engineering controls are functioning properly and employees are using proper work practices.
- l. Perform air monitoring in accordance with NESHAP and OSHA standards and as follows:
 - (1) For all Class I and II abatement projects, the contractor shall conduct air monitoring for background or reference ambient asbestos fiber levels before the asbestos projects begin.
 - (2) For Class I and II abatement projects, the contractor shall conduct daily monitoring that is representative of the exposure of each employee who is assigned to work within the regulated area who is performing Class I or II work, unless the employer has made a negative exposure assessment for the entire operation. Additional personnel monitoring shall be performed when warranted by the size of the project or by circumstances that may require excursion level monitoring.
 - (3) Area monitoring outside the exhaust, decon and load-out areas when full enclosures are used, to demonstrate control of fiber release to the outside air.
 - (4) Monitoring to ensure that the negative air condition is maintained inside the enclosure when they are used.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 28 of 55

- (5) On all operations other than Class I and II operations, the contractor shall conduct periodic monitoring of all work where exposures are expected to exceed a PEL, at intervals sufficient to document the validity of the exposure prediction.

Responsible Asbestos Mgmt. Group:

- 7. Visit the work site at least once per work shift during the course of the asbestos abatement or repair and maintenance project to ensure the regulated area is in compliance with all OSHA regulations.
- 8. If the regulated area is not in compliance with OSHA regulations, the responsible Asbestos Management Group shall stop work until the violation is rectified.
- 9. A written report shall be completed for any violation found on the project. The report shall include:
 - a. The date and time the violation was observed.
 - b. The name of the abatement contractor and name of the contractor's AHERA certified Contractor/Supervisor on the project.
 - c. Description of the violation.
 - d. Any comments given by the abatement contractor's supervisor regarding reasoning for observed violation.
 - e. If possible, photos of the observed violation.
 - f. Date and time the violation was corrected.
 - g. Date and time the abatement project was allowed to resume.

NOTE: These reports shall be used to determine future contract awards.

- 10. The responsible Asbestos Management Group, ADOT Industrial Hygienist or a qualified consultant shall perform final clearance monitoring for all Class I and II work as required by OSHA before the enclosure can be removed and the area is reoccupied. The number of samples shall be determined by the size of the area and the configuration of the space in each enclosure. Analysis shall be by PCM unless otherwise specifically stated. Air samples results shall be available on the job site within 24 hours (turnaround time), or less. PCM final air clearance shall be to the AHERA standard of 0.01 f/cc per sample. If TEM is

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 29 of 55

used for final clearance, TEM clearance shall be 70
asbestos structures/mm² of filter surface area.

1.13 CLASS IV ASBESTOS WORK

All General Operation Building Maintenance Specialist and Supervisors and Information Technologies Technicians shall receive and maintain OSHA Class IV training and certification. Class IV asbestos work activities are OSHA regulated maintenance and custodial activities during which employees contact ACM and PACM. Class IV asbestos work also includes activities that involve cleaning up waste and debris containing ACM and PACM. This includes dusting surfaces, vacuuming carpets, mopping floors, cleaning up ACM or PACM materials from thermal system insulation or surfacing ACM/PACM. Workers may contact ACM or PACM when performing a wide variety of routine jobs that result in incidental disturbance such as removing a cover plate from an outlet or light switch, moving ceiling panels to gain access to areas above suspended ceilings, changing a light bulb in a light fixture that is attached to a ceiling containing ACM, taping a tear in TSI material where there will be no disturbance of the matrix and the removal and disposal of loose or broken floor tiles. Two (2) hours of training and certification is required for all employees who perform Class IV asbestos work.

1.14 CORRESPONDING POLICIES

FIN-9.06 Project Numbers-Project Number Assignment-Project Number Reference Report

LEG-2.01 ADOT Policy Regarding Non-Construction Contracts

MGT-3.03 Capital Improvement Plan

MGT-9.02 Records Storage Procedure

MGT-9.03 Records Destruction Procedure

MGT-9.04 Records Management

MGT-9.09 Records Retention and Disposition Schedule

MGT-12.01 Space Utilization Policy

PER-5.05 Guidelines for Progressive Discipline

SAF-5.01 ADOT-Issued Personal Protective Equipment Usage

SAF-5.09 Respiratory Protection Program

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 30 of 55

EXHIBIT A

This form can be found on ADOT's intranet at: <http://adotnet/forms/indexalpha.asp>



ARIZONA DEPARTMENT OF TRANSPORTATION **ASBESTOS CLEARANCE REQUEST FORM**

CLEARANCE TYPE REQUESTED:

- | | |
|--|---|
| <input type="checkbox"/> ASBESTOS SURVEY | <input type="checkbox"/> ASBESTOS ABATEMENT |
| <input type="checkbox"/> DEMOLITION | <input type="checkbox"/> REPAIR AND MAINTENANCE |
| <input type="checkbox"/> RENOVATION | |

Desired Completion Date: _____

Address of planned work: _____

Project Number: _____ Parcel Number: _____ Building Number: _____

Site Name: _____ Building Function Type: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Description of requested work: _____

Justification: _____

Special Instructions: _____

☐ Photos Attached ☐ Floor Plan Attached ☐ Site Plan Attached

Person requesting clearance: _____ Date: _____

Title: _____

Org Name: _____ Org #: _____ Phone Number: _____

Org Supervisor/Manager Signature: _____

Approved By: _____ Date: _____

Title: _____

RESPONSIBLE ASBESTOS MANAGEMENT GROUPS:

ENVIRONMENTAL PLANNING GROUP:

Ed Green
Hazardous Materials Coordinator
(602) 712-7768
egreen@dot.state.az.us

RIGHT-OF-WAY GROUP:

Bob Patoni
Manager of Property Management Section
ADOT Designated EPA/NESHAP Primary Contact
(602) 712-6568
rpatori@dot.state.az.us

Harry De Prins
Demolition Coordinator
ADOT Designated EPA/NESHAP Backup Contact
(602) 712-8734
hdeprins@dot.state.az.us

GENERAL OPERATIONS GROUP:

Bob Harris
General Operations Manager
(602) 712-7829
bharris@dot.state.az.us

Roger Gorres
Physical Plant Dir., Central Region
(602) 712-8197
rgorres@dot.state.az.us

Pat Terry
Physical Plant Dir., South Region
(520) 628-5809
pterry@dot.state.az.us

Frank Young
Physical Plant Dir., North Region
(928) 779-7541
fyoung@dot.state.az.us

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 31 of 55

EXHIBIT B

The demolition authorization form can be found at: <http://adotnet/forms/indexalpha.asp>

ARIZONA DEPARTMENT OF TRANSPORTATION
206 S. 17th Avenue
Phoenix, Arizona 85007

AUTHORIZATION FOR DEMOLITION OF ADOT BUILDING

DESCRIPTION OF BLDG:

BLDG NO:

SITE NO/ADDRESS

The following have reviewed the request for demolition, including pictures or visual inspection of the structure, and hereby approve the demolition.

ADOT - Property Control Officer

Date

ADOT - State Building Inspector

Date

ADOT General Operations Director

Date

I hereby certify that the above referenced building has been demolished and that all applicable Laws and regulations regarding asbestos inspection and abatement, etc. have been complied with prior to, and post, demolition.

ADOT Org Manager/Authorized Representative

Date

Witness

Date

When signed, return this form to General Operations Director (Mail Drop 100F), with a copy to the State Building Inspector (Mail Drop 123F) and Fixed Assets (Mail Drop 203B). Retain a copy for your files.

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 32 of 55

EXHIBIT C

This form can be found on the intranet at: <http://adotnet/forms/indexalpha.asp>

NESHAP NOTIFICATION FOR RENOVATION AND DEMOLITION ACTIVITIES				
Arizona Department of Transportation Facilities - Revised 06/30/2002				
National Emission Standards for Hazardous Air Pollutants (NESHAP)				
THIS LINE FOR NESHAP REGULATORY AGENCY USE	U.S. Postal Service Postmark Date:	Commercial Delivery Service Delivery Date:	Other Hand Delivery Date:	ACTS#:
1. TYPE OF NOTIFICATION: () Original; () Revision 1; () Rev. 2; () Rev. 3; () Rev. 4; () Rev. 5; () Rev. 6; () Rev. 7; () Rev. 8; () Rev. 9; () Cancel; ()				
2a. ADOT FACILITY INFORMATION:				
Purchase Order Number(s) Issued:				
Mailing Address:				
City/Community:			State:	Zip:
Contact Person:		Telephone:	Fax:	
2b. ASBESTOS REMOVAL CONTRACTOR/OPERATOR:				
Address:				
City:			State:	Zip:
Contact Person:		Telephone:	Fax:	
2c. DEMOLITION CONTRACTOR/OPERATOR:				
Address:				
City:			State:	Zip:
Contact Person:		Telephone:	Fax:	
3. TYPE OF OPERATION: () Renovation, () Emergency Renovation, () Demolition, () Ordered Demolition, () Annual Non-scheduled Operations				
4. PROVIDE DATE OF THOROUGH INSPECTION OF FACILITY, OR AFFECTED PART, BY AN AHERA (Asbestos Hazard Emergency Response Act) CERTIFIED BUILDING INSPECTOR				DATE:
5. FACILITY DESCRIPTION (Attach site location map for multiple structures at one street address or installation)				
Building Name:			Visible Signage:	
Street Address:			Identifying Features:	
City:		County:	State:	Zip:
City/County Renovation Permit#:		City/County Demolition Permit#:		
Building Size in Floor Area (Sq. Ft.)		Number of Floors Affected:		Age of Facility:
HOUSING UNITS ACQUIRED BY ADOT ARE NESHAP FACILITIES		Present Use:		Prior Use:
6. PROCEDURE, INCLUDING ANALYTICAL METHOD, EMPLOYED TO DETECT THE PRESENCE OF RACM AND CATEGORY I AND CATEGORY II NONFRIABLE ACM. () Polarized Light Microscopy (PLM); () Point Counting; () Assumed; () Other _____				
NVLAP Laboratory Name _____		Number of Samples _____ Date Analyzed ____/____/____		
7. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: *NOTE: Update notice when amount of RACM changes at least 25% RACM = Regulated Asbestos-Containing Material as defined in 40 CFR 61, Subpart M, Asbestos NESHAP §61.141		Amount of RACM to be Removed or Generated*	Amount of Nonfriable ACM To Be Removed Not To Be Removed during Demo	
			CAT I	CAT II
On Facility Components: Pipes (Linear Feet)				
On Facility Components: Surface Area (Square Feet)				
Off Facility Components: Volume (Cubic Feet)				
8. DATES FOR ASBESTOS REMOVAL (MM/DD/YY) Start Date:		Completion Date:		Days of Operations: M T W TH F SA SU
9. DATES FOR DEMOLITION (MM/DD/YY) Start Date:		Completion Date:		Hours of Operations:
Mail/Deliver to: Copy to ADOT Procurement Office: Mail original to County NESHAP Agency listed below if regulated by that county:				
Tracy Neal (T-5109B) NESHAP Coordinator Arizona DEQ/AQD 1110 W Washington St. Phoenix, AZ 85007 602-771-2333	ADOT Procurement Contract Management 1739 W. Jackson Rm #100 Phoenix, AZ 85061	Maricopa County APCD NESHAP Coordinator Attn: Erin Fairbank 1001 N. Central, #300 Phoenix, AZ 85004 602-505-6708	Pima County DEQ NESHAP Coordinator Attn: Clem Fernandez 130 W. Congress St. Tucson, AZ 85701 520-743-3360	Pinal County AQCD NESHAP Coordinator Attn: Kale Walsh P.O. Box 987 Florence, AZ 85232 520-868-6765

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 33 of 55

10. DESCRIPTION OF PLANNED DEMOLITION/RENOVATION WORK: <input type="checkbox"/> Thermal System Insulation <input type="checkbox"/> Popcorn Ceiling Texture <input type="checkbox"/> Duct/Seam Tape <input type="checkbox"/> Regulated Drywall System <input type="checkbox"/> Asbestos-Containing Roof Removal <input type="checkbox"/> Asbestos Cement Pipe <input type="checkbox"/> Asbestos Cement Shingles <input type="checkbox"/> VAT/Mastic <input type="checkbox"/> Asbestos Cement Siding <input type="checkbox"/> ≥5580 sq ft w/rotating blade cut Other, please specify: _____ REMOVAL METHODS: <input type="checkbox"/> Hand/Non-Mechanical Tools <input type="checkbox"/> Mechanical/Power Tools <input type="checkbox"/> Mastic Solvents <input type="checkbox"/> Blast Trac™ Machine Other, please specify: _____			
11. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT ASBESTOS EMISSIONS: <input type="checkbox"/> Adequately Wet <input type="checkbox"/> Full Containment <input type="checkbox"/> Critical Barriers <input type="checkbox"/> Negative Air Machines, No. ____ of units to be used <input type="checkbox"/> Glove-Bag <input type="checkbox"/> Leak-Tight Wrap <input type="checkbox"/> 6-mil Bags <input type="checkbox"/> Mini-containment <input type="checkbox"/> Decontamination Unit with Hot/Cold Water and Soap for OSHA Class I work <input type="checkbox"/> Other, Describe _____			
12a. ASBESTOS WASTE TRANSPORTER #1:			
Company Name: _____			
Address: _____			
City: _____	State: _____	Zip: _____	
Contact Person: _____	Telephone: _____	Fax: _____	
12b. ASBESTOS WASTE TRANSPORTER #2:			
Company Name: _____			
Address: _____			
City: _____	State: _____	Zip: _____	
Contact Person: _____	Telephone: _____	Fax: _____	
13. ASBESTOS WASTE DISPOSAL SITE:			
Company Name: _____			
Address: _____			
City: _____	State: _____	Zip: _____	
Contact Person: _____	Telephone: _____	Fax: _____	
14. FOR ORDERED DEMOLITIONS (40 CFR 61, §61.145(A)(3), ATTACH A COPY OF THE AGENCY'S ORDERED DEMOLITION LETTER			
Name: _____		Title: _____	
State or Local Government Agency: _____		Authority: _____	
Date of Order (MM/DD/YY): _____		Date Demolition Ordered to Begin (MM/DD/YY): _____	
15. FOR EMERGENCY RENOVATIONS (40 CFR 61, §61.145(a)(4)(iv))			
Date and Hour of Emergency (MM/DD/YY - HH:MM): _____			
Description of the Sudden, Unexpected Event: _____			
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden: _____			
16. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED RACM IS FOUND OR CATEGORY I OR CATEGORY II NONFRIABLE ACM BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER: <input type="checkbox"/> Stop Work <input type="checkbox"/> Notify Owner <input type="checkbox"/> Revise Notification <input type="checkbox"/> Follow 40 CFR 61, §61.145(c) Procedures <input type="checkbox"/> AHERA Certified Contractor/Supervisor on-site			
17. I CERTIFY THAT AT LEAST ONE AHERA CERTIFIED CONTRACTOR/SUPERVISOR WILL SUPERVISE THE STRIPPING AND REMOVAL OF RACM DESCRIBED IN THIS NOTIFICATION AND THAT THE TRAINING CERTIFICATE WILL BE POSTED OR READILY AVAILABLE ON-SITE. _____ (Print Name: Owner/Operator) _____ (Title) _____ (Signature of Owner/Operator) _____ (Date)			
18. CERTIFICATION OF INSPECTION BY AN AHERA CERTIFIED ASBESTOS BUILDING INSPECTOR (All areas of Arizona): _____ (Print Name of Inspector) _____ (Company Affiliation and/or phone #) _____ (AHERA Certificate Number & Training Provider) _____ (Expiration Date)			
19. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT: Company Name: _____ Rev. Date _____ _____ (Print Name: Owner/Operator) _____ (Title) _____ (Signature of Owner/Operator) _____ (Date)			

References: Title 40, Code of Federal Regulations, Part 61, Subpart M, Asbestos NESHAP §61.145(b); Arizona Revised Statutes, Title 49 §§49-421 & 471 et. seq.; and Arizona Administrative Code, Title 18, Chapter 2, Air Pollution Control, Article II, §R18-2-1101. For more information, contact the Asbestos NESHAP Coordinator in Arizona at (800) 234-5677 x2333.

Revised: 06/30/2002; Page 2 of 2

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

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Supersedes: None

Page 34 of 55

APPENDIX A

This summary can be found on ADOT's intranet at: <http://adotnet/forms/indexalpha.asp>

ASBESTOS NESHAP NOTIFICATION REQUIREMENTS SUMMARY

As per Title 40 Code of Federal Regulations Part 61, Subpart M, Asbestos NESHAP Section 61.145(b)(4), the notification form will not be considered complete without this information. The following information is required to be included on notifications submitted, prior to the start of the notified renovation and/or demolition activity.

NESHAP NOTIFICATION FOR RENOVATION AND DEMOLITION ACTIVITIES

Arizona Department of Transportation Facilities

- | | |
|-----------------|---|
| Line (1) | Original or Revised Notification. |
| Line (2)(a) | ADOT Facility Owner Information: Provide name, address, and telephone number. |
| Line (2)(b) | Asbestos Removal Contractor/Operator: Provide name address, and telephone number. |
| Line (2)(c) | Demolition Contractor/Operator: Provide name, address, and telephone number. |
| Line (3) | Type of Operation: Type of planned work. |
| Line (5) | Facility Description: Provide size (square feet), number of floors, age, present and prior use, location, street address; and if appropriate, building number or name, floor number, and room number. |
| Line (6) | Procedure(s), including analytical method(s) employed to detect the presence of RACM, Category I and Category II nonfriable ACM. |
| Line (7) | Amount of RACM to be removed or generated.

Amount of Category I and Category II nonfriable ACM that will not be removed before demolition. |
| Line (8) | Start and Completion dates for Asbestos Removal/Renovation.
*NOTE: Start date is defined when asbestos material(s) are disturbed. |
| Line (9) | Start and Completion dates for Demolition.
*NOTE: Start date of demolition is defined when the wrecking or taking out of any load-bearing structural support member of a facility together with any related handling operations or the intentional burning of a facility begins. |
| Line (10) | Description of Demolition and/or Renovation Work. |
| Line (11) | Description of Work Practices/Engineering Controls to be used to prevent asbestos emissions. |
| Line (12)(a)(b) | Waste Transporter(s): Provide name, address, and telephone number. |
| Line (13) | Waste Disposal Site: Provide name and location of where generated asbestos-containing material(s) will be deposited. |
| Line (14) | Ordered Demolitions: *NOTE: Attach copy of the demolition order with the notification. |
| Line (15) | Emergency Renovations: *NOTE: Provide all information requested on notification form. |
| Line (16) | Description of procedures to be followed in the event that unexpected RACM is found or Category I or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder. |
| Line (17) | Signature verifying that at least one on-site trained representative will be present at the facility or affected area(s) where the stripping and removal described by notification is occurring at all times during that stripping and removal.
*NOTE: An on-site trained representative is equivalent to the 40-hour AHERA Contractor/Supervisor training. |

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 35 of 55

APPENDIX B

SUMMARY OF CHECKLISTS

The following is an accumulation of checklists that shall be utilized by the ADOT Asbestos Management Group and Monitoring Personnel to ensure all asbestos projects are in compliance with NESHAP and OSHA regulations. The checklists are available on ADOT's Intranet at:

<http://adotnet/forms/indexalpha.asp>

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 36 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

CONTRACT REVIEW CHECKLIST

CHECK #	CHECKLIST ITEM DESCRIPTION
	1. Does the contract clearly identify the form, condition, quantity and location of asbestos materials to be removed in the description of work?
	2. Is the abatement contractor responsible for notifying EPA, state and local regulatory agencies, as required, and the responsible ADOT Asbestos Management Group in writing 10 working days prior to commencement of work?
	3. Is the abatement contractor responsible for furnishing all labor, materials, services, insurance, and equipment necessary for the total removal and disposal of all asbestos in the designated area?
	4. Is the abatement contractor responsible for supplying personal protective equipment to ADOT monitoring personnel for entry into the asbestos regulated areas?
	5. Does the contract specification clearly state which operations require a fully enclosed regulated area?
	6. Does the contract require ADOT to retain the services of an Assessment Contractor to direct all air monitoring?
	7. Does the contract require the ADOT Assessment/Oversight Contractor or the abatement contractor to meet accreditation and state licensing requirements?
	8. Does the contract stipulate the abatement contractor's responsibility when unexpected asbestos is encountered during alteration projects?
	9. Does the contract require the following submittals: a. Asbestos hazard abatement plan b. Safety plan c. Name of certified testing laboratory d. Name, address, telephone number, and certification number and date of AHERA certified building inspectors and AHERA certified contractor/supervisor e. Name and location of certified waste disposal site f. Certification of worker training
	10. Does the contract establish an environmental clearance limit (or clean-to-standard) of 0.01 f/cc?

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 37 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

ASBESTOS HAZARD ABATEMENT PLAN CHECKLIST	
CHECK ✓	CHECKLIST ITEM DESCRIPTION
	1. Is the plan prepared, signed, and sealed by the Assessment/Oversight Contractor, including certification number and certification date?
	2. Does the plan include a drawing showing the location, size, and details of asbestos regulated areas, including the following: <ul style="list-style-type: none">- location of the clean and dirty areas- buffer zones- showers- storage areas- change rooms- local exhaust equipment
	3. Does the plan include a work area and breathing zone air-monitoring plan?
	4. Does the plan include the precise personal protective equipment to be used?
	5. Does the plan include step-by-step details for the sequencing of asbestos-related work?
	6. Does the plan include a disposal plan?
	7. Does the plan specify the type of wetting agent to be used?
	8. Does the plan include both Fire and Medical Emergency response plans?
	9. Does the plan include a detailed description of the environmental pollution control method?

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 38 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

PRE-ABATEMENT CHECKLIST

CHECK #	CHECKLIST ITEM DESCRIPTION	REFERENCE
	1. Has the abatement contractor obtained state or special licenses and permits, where necessary?	
	2. Has the abatement contractor notified the EPA, or the appropriate state or local regulatory agency, 10 days prior to the commencement of work?	40 CFR 61.145 (b)
	3. Has the abatement contractor provided proof that all asbestos workers and supervisors are trained in the proper removal procedures of asbestos?	29 CFR 1926.1101 (k)(9), (o)(4)(i) 40 CFR 763.121 (k)(3)
	4. Has the abatement contractor provided the name of the "competent" or "qualified" person?	29 CFR 1926.1101 (o)(4)
	5. Has the contractor provided proof that the supervisor, remaining on-site during all abatement operations, is trained in the requirements of NESHAP?	40 CFR 61.145 (c)(8)
	6. Has the contractor provided proof that all of the employees have received medical examinations and that medical records are kept?	29 CFR 1926.1101 (m), (n)(3)(i) 40 CFR 763.121 (n)(3)(i)
	7. Has the contractor provided proof that all of the employees are respirator trained and fit tested?	29 CFR 1910.134 (f), (k) 29 CFR 1926.1101 (h)(2)(i)
	8. Has the contractor provided proof that all vacuum and ventilation equipment has the manufacturer's certification that it is capable of handling airborne asbestos fibers in conformance with ANSI Standard Z9.2?	40 CFR 61.152
	9. Has the contractor provided a detailed asbestos hazard abatement plan that complies with EPA/OSHA Safety and Health requirements? (see Asbestos Hazard Abatement Plan Checklist for details)	40 CFR 61.145 (b)(4)(x)-(xi)
	10. Has the contractor provided the name, address, and phone number of the qualified person responsible for the exposure monitoring program and air sampling?	

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 39 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

PRE-ABATEMENT CHECKLIST continued

CHECK #	CHECKLIST ITEM DESCRIPTION	REFERENCE
	11. Has the contractor provided the name, address, and phone number of the testing laboratory for all asbestos sampling analysis?	
	12. Has the laboratory shown proof of participation in a proficiency analytical testing (PAT) program?	29 CFR 1926.1101 App. A
	13. Has the contractor provided a Quality Assurance plan to ensure that laboratory analysis is accurate?	29 CFR 1926.1101 App. A
	14. Has the contractor provided the name and the location of the certified waste disposal site?	40 CFR 61.145 (b)(4)(xii)

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 40 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

AREA PREPARATION CHECKLIST

CHECK #	CHECKLIST ITEM DESCRIPTION	REFERENCES
	1. If the work site has multiple employers, has the abatement contractor notified the other employers?	29 CFR 1926.1101(d)
	2. Have the mechanical systems and utilities in the containment area been disconnected from the rest of the building, if possible?	29 CFR 1926.1101 (g)(5)(i)(B)(2)
	3. Has the HVAC system been deactivated and locked off? If not, have proper isolation techniques been applied?	29 CFR 1926.1101 (g)(4)(iii)
	4. Is there on site at least one representative with NESHAP training? Is proof of training posted at abatement site?	49 CFR 61.145(c)(8)
	5. Is a "competent" or "qualified" person supervising the regulated work area? Is proof of training posted?	29 CFR 1926.1101 (g)(4)(i), (o)(3)(i) 40 CFR 61.145 (c)(8)
	6. Have adequate warning signs been placed on all approaches to asbestos regulated areas?	29 CFR 1926.1101 (k)(7) 40 CFR 763.121 (k)(1)
	7. Are all non-work surfaces vacuumed? Are the vacuums equipped with HEPA filters?	29 CFR 1926.1101 (g)(1)(i)
	8. Are all openings to the project area sealed off with only one entry/exit through the decontamination area?	29 CFR 1926.1101(g)(4), App. F
	9. Does the project require negative pressure and construction of a plastic sheet temporary barrier system?	29 CFR 1926.1101 (g)(5) 40 CFR 763.121 (e)(6)(i)
	10. Does the local exhaust system meet ACGIH and ANSI Z9.2 standards?	40 CFR 763.121 (c)(1)(ii)
	11. Do filters on vacuums and exhaust equipment meet UL586 standards for HEPA filters and are the filters labeled?	
	12. Does the local exhaust system have sufficient capacity to maintain a minimum pressure differential of negative 0.02 inches of water gauge and provide 4 air changes per hour?	29 CFR 1926.1101 (g)(5)(i)(A)(3), App. F

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 41 of 55

Project Title: _____ Date: _____
 Contract Number: _____ Site Name: _____
 Parcel #: _____ Site #: _____ Building #: _____
 Structure ID: _____ Beginning MP: _____ Ending MP: _____
 Building Function Type: _____

AREA PREPARATION CHECKLIST

CHECK #	CHECKLIST ITEM DESCRIPTION	REFERENCES
	13. Is the local exhaust system capable of operating 24 hours per day?	29 CFR 1926.1101 (g)(5)(i)(A)(4), App. F
	13a. Has HEPA filtered local exhaust ventilation been provided for portable hand and power tools?	
	14. Is the worker decontamination facility properly designed with a shower facility located between the clean and dirty change rooms? Is the shower facility provided with towels, soap, and hot and cold water?	29 CFR 1926.1101 (j) 40 CFR 763.121 (j)(1)
	15. Have procedures been established to assure protective clothing and equipment are completed and in good condition prior to entering the regulated area?	29 CFR 1926.1101 (i)(4) 40 CFR 763.121 (i)(4)
	16. Is contaminated water from the decontamination process filtered or disposed as asbestos waste?	
	17. Have adequate procedures governing waste and equipment removal been established?	40 CFR 61.150
	18. Are selected respirators approved by NIOSH for use with asbestos?	29 CFR 1910.134 (d)(1)(ii) 29 CFR 1926.1101 (h)(2)(i)
	19. Is the air source for air supply respirators from either a bank of compressed air cylinders or from an air compressor?	29 CFR 1910.134 (d)(i)(1)
	20. Are the air sources labeled as being filled with Grade D or better breathing air?	29 CFR 1910.134 (i)(1)(ii)
	21. Are all components for the air supply respirator made by the same manufacturer and are intended to work together?	29 CFR 1910.134 (fh) (4)
	22. Is protective equipment required, such as disposable coveralls, gloves, shoe covers, eye protection, and hard hats?	29 CFR 1910.133, .135 and .136 29 CFR 1926.1101 (i)(1) 40 CFR 763.121 (i)
	23. Is cooling in-line air supply necessary?	

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 42 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

ASBESTOS REMOVAL CHECKLIST

CHECK <input checked="" type="checkbox"/>	CHECKLIST ITEM DESCRIPTION	REFERENCE
	1. Is the material being treated with a solution of water and a wetting agent to reduce fiber release?	29 CFR 1926.1101 (g)(1)(ii), App. F 40 CFR 61.145(c)(2)(i)
	2. Has the contractor obtained written approval from the EPA, state, or local agency before a dry removal project begins?	40 CFR 61.145 c(3)(i)(A)
	3. Is the removal complete to the substrate?	29 CFR 1926.1101 App. F
	4. Is material packed wet?	40 CFR 61.150(a)(1)
	5. Is the material being placed in fiber or metal drums lined with 6-mil plastic bags, or in 6-mil or stronger plastic bags?	
	6. Are the drums/bags properly labeled with OSHA approved labels?	29 CFR 1926.1101 (k)(8) 40 CFR 61.150(a)(1)(iv)
	7. Are the drums/bags being decontaminated prior to removing from regulated area?	40 CFR 61.150(a)
	8. Is the "lock down" encapsulant being used in areas where all asbestos has been removed?	
	9. Is daily air monitoring used?	29 CFR 1926.1101 (f)(3)(i)

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 43 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

ENVIRONMENTAL MONITORING CHECKLIST

CHECK <input checked="" type="checkbox"/>	CHECKLIST ITEM DESCRIPTION	REFERENCE
	1. Has a final clearance level of 0.01 f/cc been set?	
	2. Is phase contrast microscopy (PCM) used to analyze air samples?	29 CFR 1926.1101 App. A
	3. Have background or reference ambient asbestos fiber levels been determined?	29 CFR 1926.1101 (f)(2)
	4. Have personal air samples been taken to establish airborne asbestos TWA's during the performance of each new task?	29 CFR 1926.1101 (f)(1)
	5. Is daily area monitoring provided both inside and outside the regulated area?	29 CFR 1926.1101 (f)(3), (g)(4)(ii)(B)
	6. Does post-clean-up monitoring meet contract specifications?	
	7. Is air sample analysis conducted in accordance with NIOSH standards?	29 CFR 1926.1101 App. A
	8. Are monitoring results reported as soon as possible after receipt of results?	29 CFR 1926.1101 (f)(5)(i)

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 44 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

AREA CLEANUP CHECKLIST

CHECK <input checked="" type="checkbox"/>	CHECKLIST ITEM DESCRIPTION	REFERENCE
	1. Has the contractor removed all asbestos materials from the building substrate?	29 CFR 1926.1101, App. F
	2. Has the contractor wet-cleaned all surfaces and equipment within the work area?	29 CFR 1926.1101, App. F
	3. Has the Assessment Contractor performed the initial compliance testing?	
	4. If an enclosure was used, has the contractor removed only the top layer of polyethylene from the floors and walls?	
	5. If an enclosure was used, have leaks onto the second layer of sheeting and all other surfaces in the work area been cleaned with water and/or HEPA filtered vacuums?	29 CFR 1926.1101, App. F
	6. Has the area been visually inspected to ensure that it is free of visible friable asbestos material and debris?	29 CFR 1926.1101, App. F
	7. Does the final inspection reveal a "dust free" work site?	29 CFR 1926.1101, App. F

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 45 of 55

Project Title: _____ Date: _____
 Contract Number: _____ Site Name: _____
 Parcel #: _____ Site #: _____ Building #: _____
 Structure ID: _____ Beginning MP: _____ Ending MP: _____
 Building Function Type: _____

ASBESTOS DISPOSAL CHECKLIST

CHECK <input checked="" type="checkbox"/>	CHECKLIST ITEM DESCRIPTION	REFERENCE
	1. Has asbestos waste been collected wet?	29 CFR 1910.1001 (f)(1)(vi) 29 CFR 1926.1101 (g)(1)(ii) 40 CFR 61.150(a)(1)
	2. Have all asbestos waste and scrap material including protective equipment been properly labeled and enclosed in impermeable bags or contained in appropriate drums?	29 CFR 1910.1001(k)(6) 29 CFR 1926.1101(l)(2) 40 CFR 61.150(a)(1)(iii)
	3. Have OSHA warning labels been affixed to waste containers?	29 CFR 1910.1001(j)(4) 29 CFR 1926.1101(k)(8) 40 CFR 61.150(a)(1)(iv)
	4. Have the asbestos-containing waste containers been labeled with the generator name and location at which the waste was generated?	40 CFR 61.150(a)(1)(v)
	5. Has an interim storage area been assigned to the contractor for waste-containing drums?	
	6. Has a manifest/Waste Shipment Record been completed by the waste generator?	40 CFR 61.154(d)(1)(i)-(viii)
	7. Have the transport vehicles been properly posted with danger signs during loading and unloading operations?	40 CFR 61.150(b)(3)(c)
	8. Have sufficient precautions been taken to minimize loss or damage potential during transport?	40 CFR 61.150(a)
	9. Are all workers who are loading the sealed waste drums wearing appropriate respiratory protection?	40 CFR 61.150(a)

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 46 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

FINAL ACCEPTANCE AIR MONITORING CHECKLIST		
CHECK <input checked="" type="checkbox"/>	CHECKLIST ITEM DESCRIPTION	REFERENCE
	1. Does the contract require using aggressive sampling techniques to collect post-abatement air samples?	
	2. Does area monitoring reveal acceptable clearance concentrations (< 0.01 f/cc) or ambient background levels?	
	3. Do air-sampling procedures comply with NIOSH standards and/or contract requirements?	29 CFR 1926.1101, App. A
	4. Has the contractor satisfied the requirements of checklist item #2 and visual inspection of work site to merit release?	

SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 47 of 55

Project Title: _____ Date: _____

Contract Number: _____ Site Name: _____

Parcel #: _____ Site #: _____ Building #: _____

Structure ID: _____ Beginning MP: _____ Ending MP: _____

Building Function Type: _____

POST-ABATEMENT CHECKLIST

CHECK <input checked="" type="checkbox"/>	CHECKLIST ITEM DESCRIPTION	REFERENCE
	1. Have copies of all appropriate environmental monitoring documents been supplied to the OICC/ROICC or the Navy Consultant?	29 CFR 1910.1001(m)(1)(i) 29 CFR 1926.1101(n)(2)(i) & (iii), (n)(3)(i)
	2. Has the Asbestos Program Manager been informed of the removal?	
	3. Has the contractor provided written proof of the total amount of asbestos received and buried by the landfill?	40 CFR 61.150(d)(3)

SAF-6.01 Asbestos Management Policy

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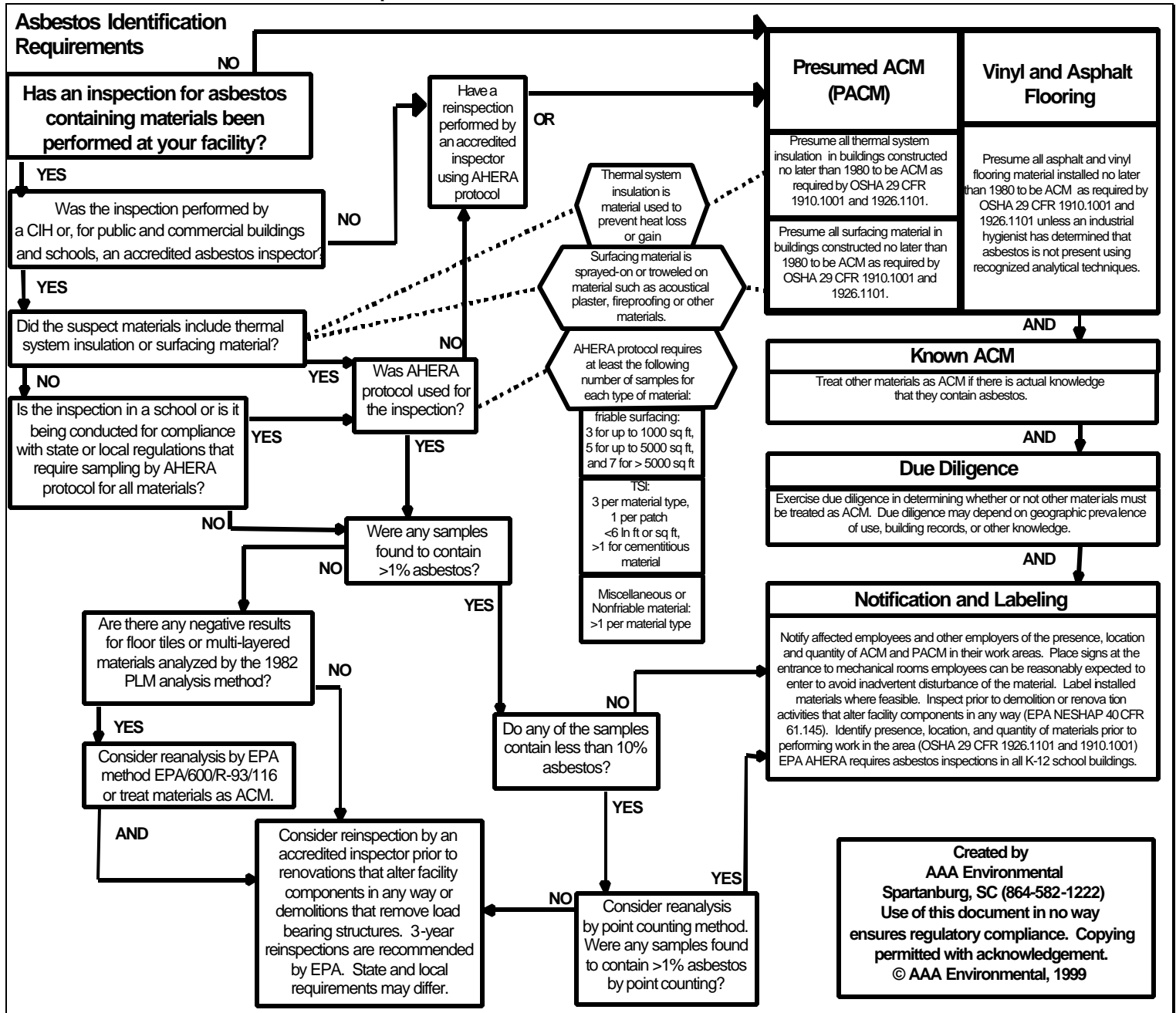
Page 48 of 55

APPENDIX C

ASBESTOS CONTROL FLOWCHARTS

These charts are available on ADOT's intranet at: <http://adotnet/forms/indexalpha.asp>

Asbestos Identification Requirements Flowchart



SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

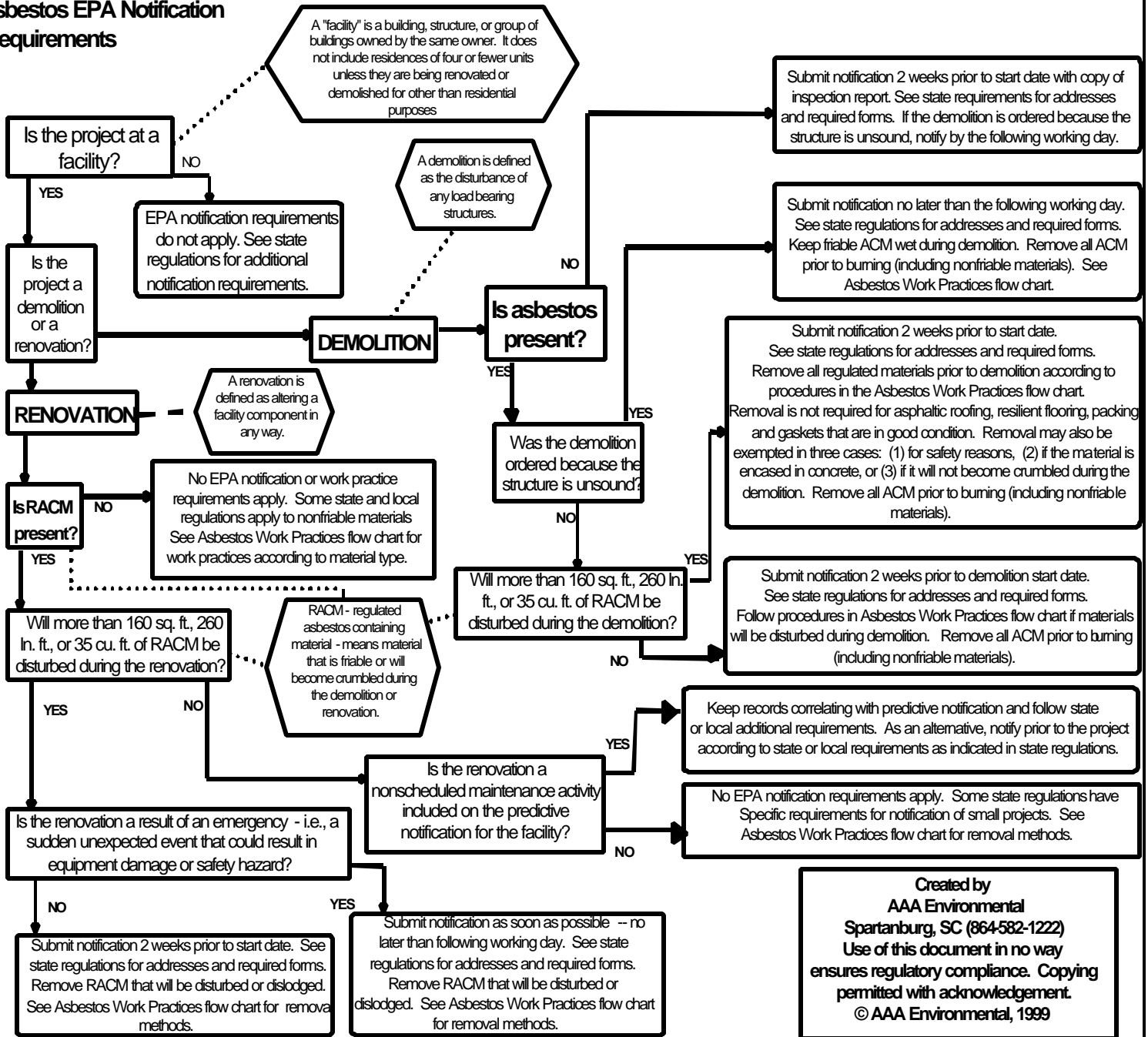
Transmittal: 2003-December

Supersedes: None

Page 49 of 55

Asbestos EPA Notification Requirements Flowchart

Asbestos EPA Notification Requirements



SAF-6.01 Asbestos Management Policy

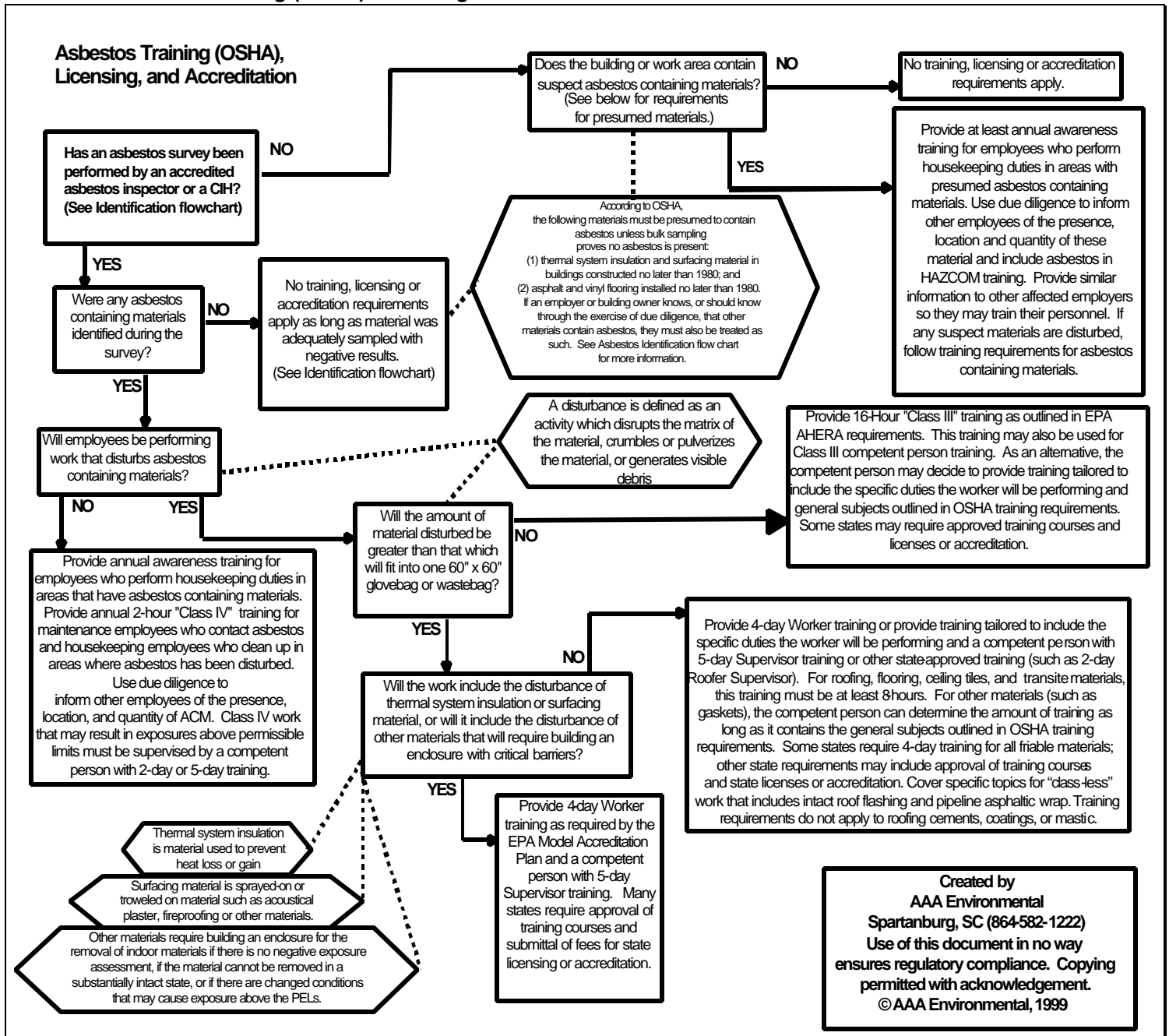
Effective: December 30, 2003

Transmittal: 2003-December

Supersedes: None

Page 50 of 55

Asbestos Training (OSHA) Licensing and Accreditation Flowchart



SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

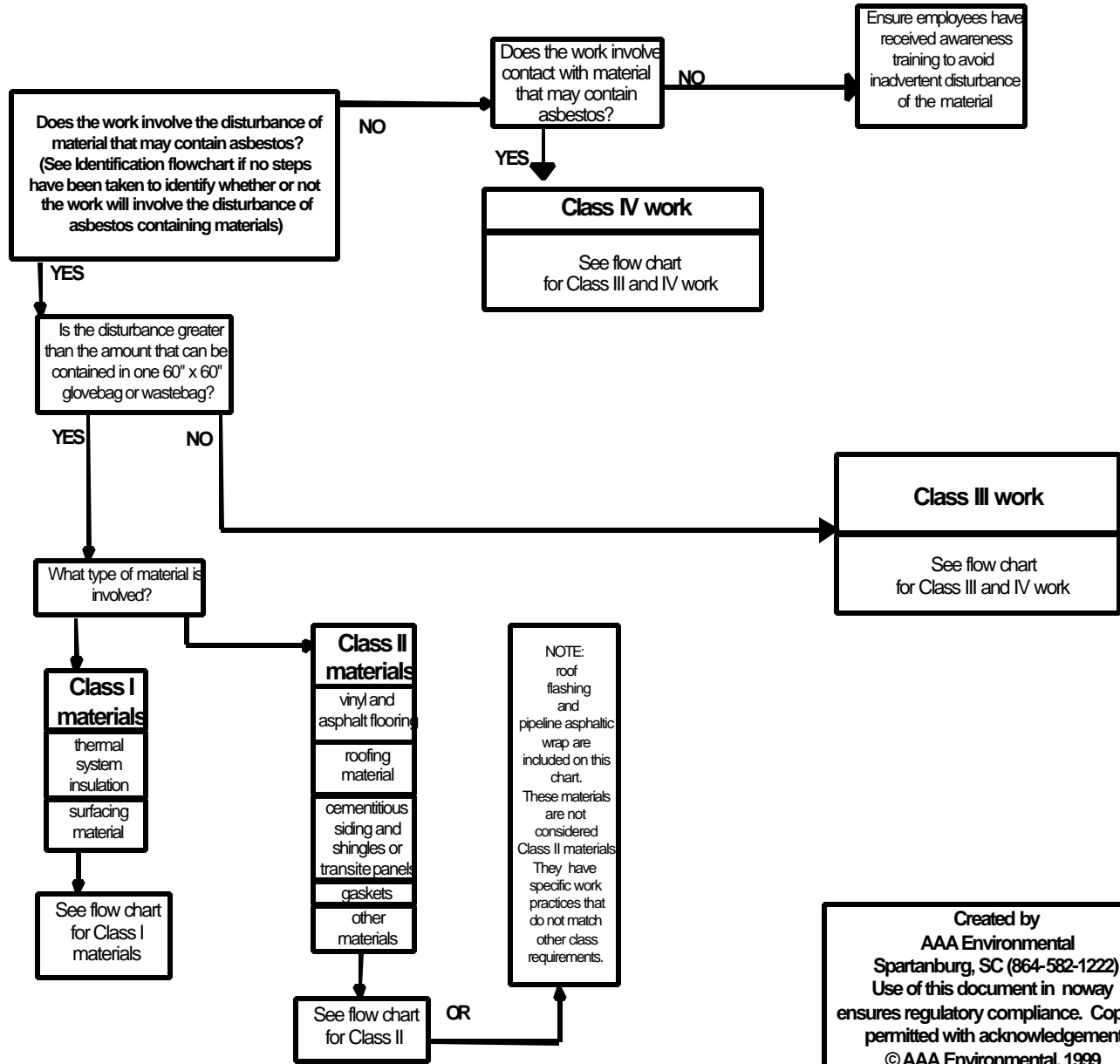
Transmittal: 2003-December

Supersedes: None

Page 51 of 55

Asbestos Work Practices Flowchart

Asbestos Work Practices



SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

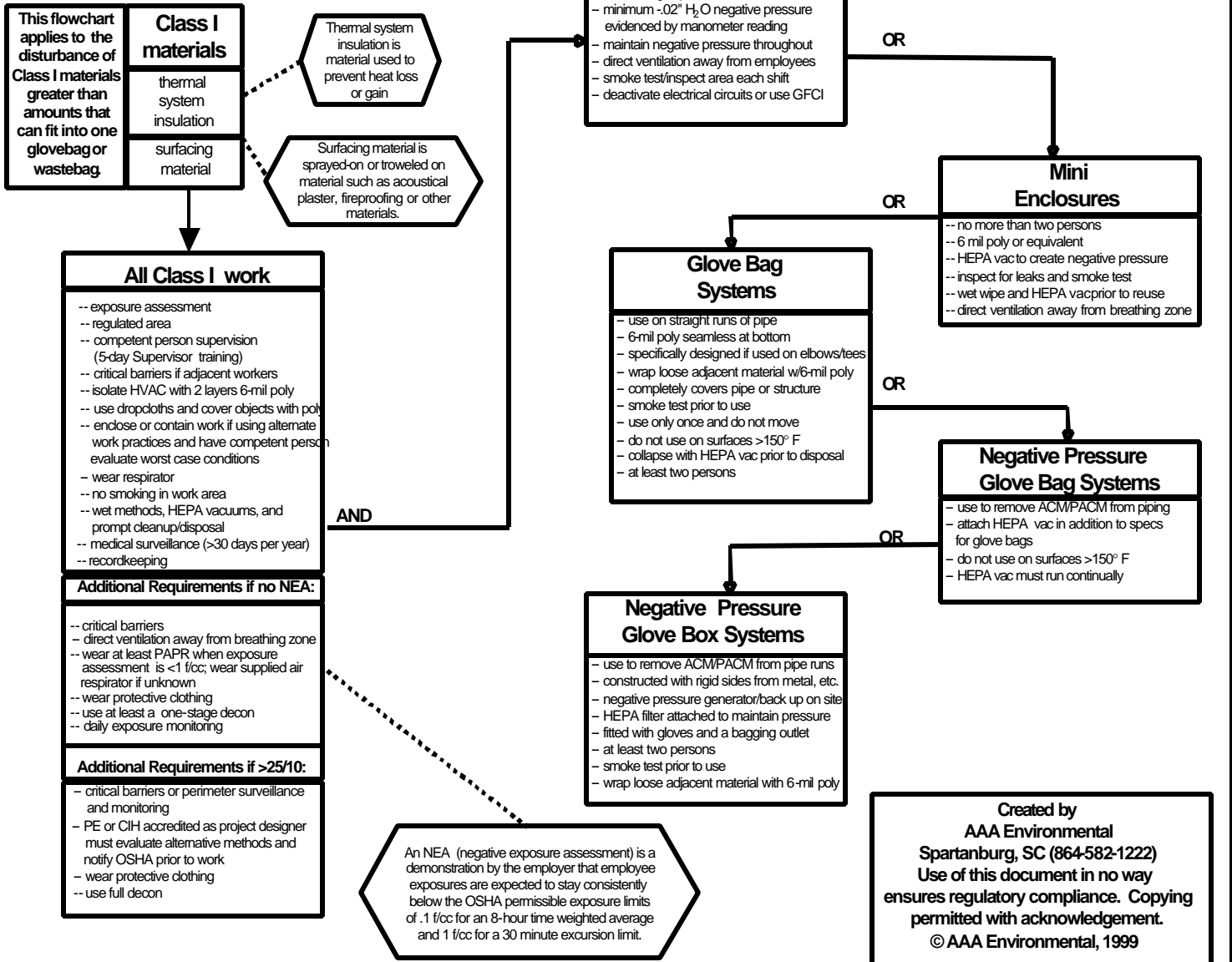
Transmittal: 2003-December

Supersedes: None

Page 52 of 55

Asbestos Work Practices – Class I Work Flowchart

Asbestos Work Practices Class I Work



SAF-6.01 Asbestos Management Policy

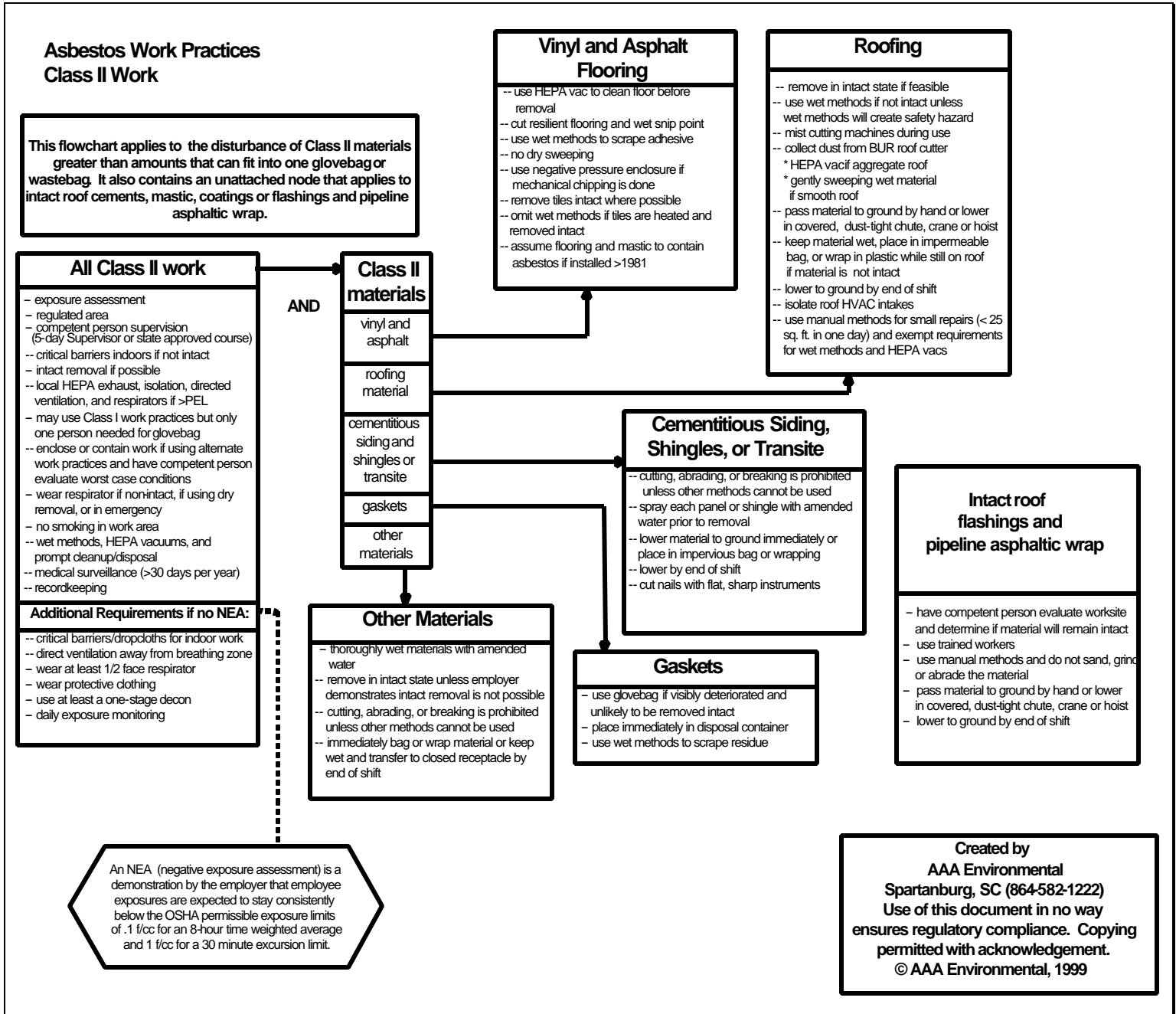
Effective: December 30, 2003

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Page 53 of 55

Asbestos Work Practices – Class II Work Flowchart



SAF-6.01 Asbestos Management Policy

Effective: December 30, 2003

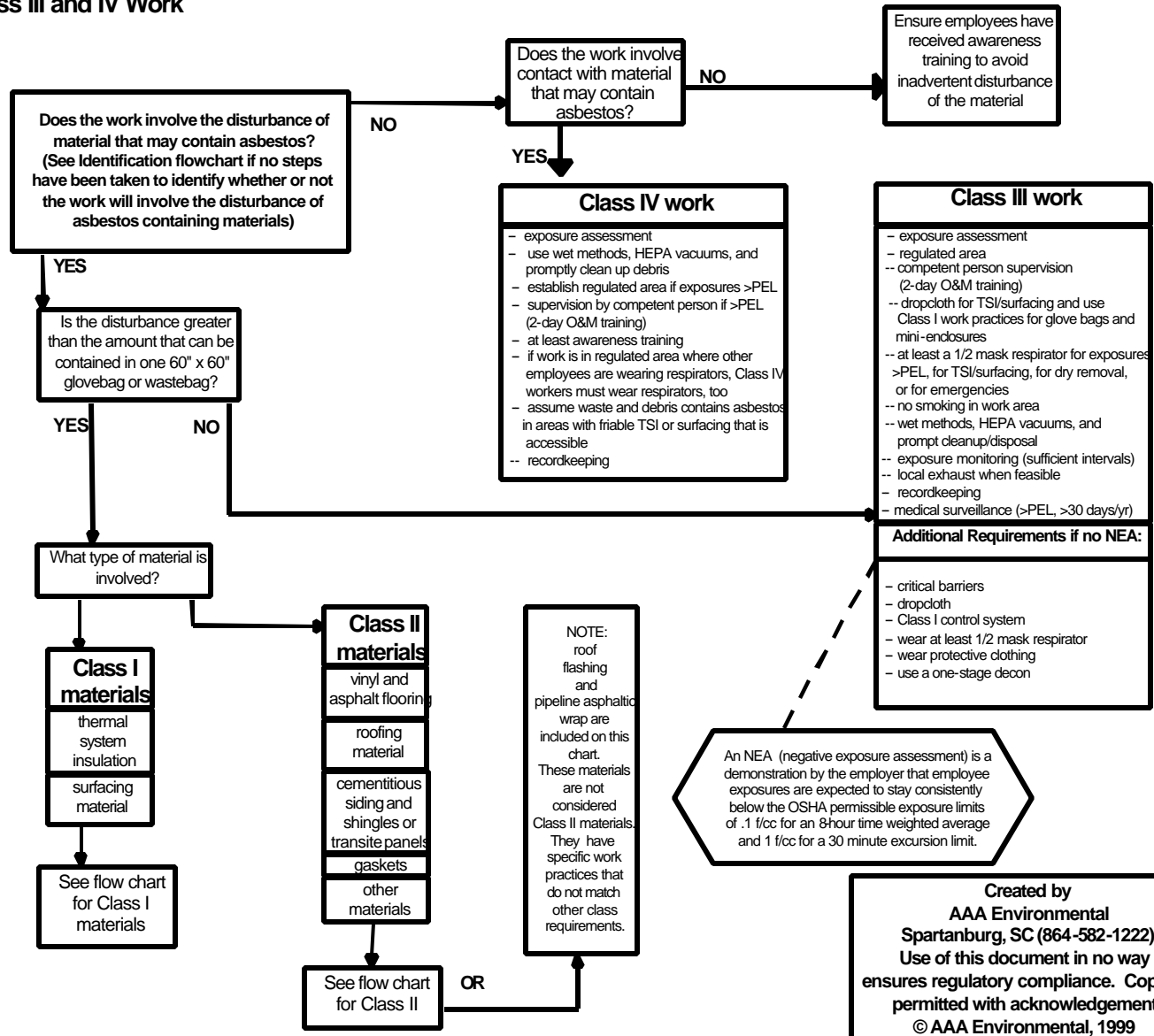
Transmittal: 2003-December

Supersedes: None

Page 54 of 55

Asbestos Work Practices – Class III and IV Work Flowchart

Asbestos Work Practices Class III and IV Work



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Page 55 of 55

Asbestos Waste Disposal Flowchart

Asbestos Waste Disposal

Is the waste associated with the disturbance of material that contains more than 1% asbestos?
NOTE: Dust and debris in areas with deteriorated ACM or accessible TSI or surfacing ACM or PACM must be treated as asbestos contaminated waste. A HEPA vacuum should be used to collect this material and the waste from the vacuum cleaner should be disposed of as RACM.

NO

There are no disposal requirements related to asbestos. However, there may be requirements related to other materials such as lead based paint.

RACM - regulated asbestos containing material - means material that is friable or material that became crumbled, pulverized, or reduced to powder prior to disposal. Asphaltic roofing materials are usually not considered friable if they were removed using manual methods such as pry bars, spud bars, axes, hatchets and knives.

Follow state, county or local requirements for disposal of nonfriable asbestos waste. Material should be handled by persons who have at least received 2-hour asbestos awareness training. All materials other than roofing must be placed in sealed, labeled, impermeable bags or other closed, labeled, impermeable containers.

YES

Is the material regulated asbestos containing material (RACM)?

NO

Is the waste roofing material?

NO

YES

Intact means the material has not been crumbled, pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix.

Is the roofing material intact?

YES

NO

Lower the material to the ground as soon as possible - no later than the end of the shift. Material can be carried or passed to the ground by hand or lowered to the ground via a covered, dust-tight chute, crane or hoist. Transfer unwrapped material to a closed receptacle to preclude the dispersion of dust.

Keep the material adequately wet, make sure there are no visible emissions during disposal. The material must be placed in sealed, leaktight containers and disposed of in EPA approved landfills. Waste must have three labels: OSHA danger labels, NESHAP waste generator labels, and Department of Transportation labels indicating the materials are Class 9, NA 2212. Keep waste shipment records and follow state or local requirement for submitting the records to appropriate regulatory authorities following disposal. Mark vehicles during the unloading and loading of the waste material.

Lower the material to the ground as soon as practicable -- no later than the end of the shift. While the material remains on the roof, keep it wet, place it in an impermeable waste bag, or wrap it in plastic sheeting. Transfer material to a closed receptacle upon lowering. Follow state, county, or local requirements for disposal.

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